Consumer Federation of America

PRAGMATIC, PROGRESSIVE CAPITALISM:

Roadmap to a Remarkably Successful, Uniquely American Political Economy From Brandeis to Stiglitz & Beyond the 2020 Election

Mark Cooper

Director of Research

August, 2020

1620 Eye Street, NW, Suite 200 | Washington, DC 20006 | (202) 387-6121 | ConsumerFed.org

PART I:
REINTRODUCTION

1. PURPOSE AND RECOMMENDATIONS 1

Reform of Regulation and Antitrust Takes Center Stage
Understanding the Remarkably Successful Uniquely American Political Economy of the Second Industrial Revolution
Summary of Recommendations
Outline

2. FROM BRANDEIS TO STIGLITZ AND INTO THE 2020 ELECTION 7

A Bridge from Brandeis to Stiglitz and The Terrain of the Contemporary Debate
The 2020 Debate Over Political Economy
Recognizing the Importance and Limits of Competition and Markets

PART II:
THE BRANDEIS PROTOCOL FOR PRAGMATIC, PROGRESSIVE CAPITALISM

3. THE ECONOMIC, SOCIAL, AND LEGAL BASIS FOR REGULATED COMPETITION 16

Brandeis Sources
100 Elements of the Brandeis Protocol
Process: The Hallmark of Pragmatism
Lawyers, A Profession Gone Astray

4. THE PRAGMATIC, PROGRESSIVE MIDDLE: THE SECOND NEW DEAL 25

Regulated Competition
A Progressive Constitution
Antitrust as an Instrument of Progressive Capitalism Policy
Practicing Political Economy: Pragmatic, Progressive, Democratic, Market Capitalism

PART III
THE STIGLITZ MODEL OF PRAGMATIC, PROGRESSIVE CAPITALISM IN RELATION TO CONTEMPORARY ECONOMIC THOUGHT

5. THE STIGLITZ MODEL 35

The Continuity of the Pragmatic, Progressive Capitalist Model
The Pivotal Role of Progressive Policy in the History of Industrial Capitalism
Pervasive Market Imperfections: Two Dozen Nobel Laureates
Market Imperfections and the Challenge for Political Economy in the Stiglitz Framework

6. ANALYSIS OF IMPORTANT SECTORS AND PROCESS 48

The Financial Sector
National Innovation Systems
Why Nations Succeed

PART IV:
THE SUPERIOR PERFORMANCE OF
PRAGMATIC, PROGRESSIVE CAPITALISM

7. AN ECONOMETRIC EVALUATION OF ECONOMIC PERFORMANCE: FREE MARKET FUNDAMENTALISM V. PRAGMATIC PROGRESSIVE CAPITALISM 60

Periodization and Variables
Economic Performance
Periodization, Elections, and Shifts in Policy

8. PROGRESSIVE CAPITALISM IN AMERICA: THE GREATEST HALF CENTURY THAT EVER WAS 68

It Was Entirely the Result of Half a Century of Progressive Capitalism:
Reinforcing the Econometric Evidence
Evidence on Missing Factors: Social Protection, Innovations, Finance, and Competition
Conclusion

PART V:
CRAFTING PUBLIC POLICY TO PRESERVE THE BENEFITS AND PREVENT AND THE ABUSE OF DIGITAL TECHNOLOGIES

9. THE NEW CHALLENGES OF DIGITAL TECHNOLOGY 81

The Urgent and Complex Need for Policy
The Structure and Challenges of the Digital Revolution in Communications
Another View
The Dilemma of Economic Transformation is Intense and Obvious

10. ANTITRUST AND REGULATION FOR THE DIGITAL AGE 94

Complexity, Challenges and Core Principles
Antitrust Struggles with Complex, Behavioral Regulation
Regulation: Enduring Principles for a New Big Data Platform Oversight Agency

11. "DOS AND DON'TS:" BUILDING GUARDRAILS AND GUIDANCE FOR DIGITAL COMMUNICATIONS 107

Oversight in Necessary and Justified
Dual Jurisdiction is Crucial
Avoiding the Extremes: Utility-Like Regulation and Horse and buggy Competition
Antitrust Agencies, particularly the FTC, are Ill-equipped to Control Abuse of Big Data Bottleneck Market Power

BIBLIOGRAPHY 123

ENDNOTES 130

PART I
REINTRODUCTION

1. PURPOSE AND RECOMMENDATIONS

REFORM OF REGULATION AND ANTITRUST TAKES CENTER STAGE

A House Antitrust Subcommittee hearing on July 29th appears to have been "a rout in favor of the anti-monopoly movement" and reflects ongoing efforts to "get Republicans on board with sweeping updates to U.S. antitrust laws." The *Washington Post* editorialized that

> getting involved… to consider whether antitrust doctrine needs an update in the digital age, when big data shows skews what regulators thought they knew about pricing, and when unforeseen and often immeasurable harms may arise from the concentration of too much control in too few hands… Is a worthy task."[1]

While the *Washington Post* applauded Congressional hearings, it cautioned that "the line-drawing between good business and bad behavior may not be as easy as legislators make it seem… They must take care that… remedies address clear and concrete injuries – and that they don't cause new ones.[2]

The complexity of the situation is quite clear in the finger pointing about how we got into this mess:[3]

- The antitrust laws,
- lax enforcement,
- courts applying a discredited theory that gives all the benefit of the doubt to efficiency claim

The uncertainty over causes interacts with the uncertainty over remedies:

- a radical antitrust approach that breaks-up all the dominant digital firms with little regard for efficiencies of integration or
- a more nuanced approach that recognizes and seeks to regulate platforms to prevent abuse while capturing some of their large efficiencies?

This paper seeks to shed light on both the challenges and the remedies by taking a view that looks at the history of how the U.S. met a similar challenge well over a century ago. The premise is that there is a great deal to be learned from history in the work of one of the leading reformers of the U.S. economy early in the 2nd industrial revolution – Louis Brandies – and linked directly to one of the leading advocates of reform at a similar moment in the 3rd industrial (digital) revolution – Joseph Stiglitz.

Their analyses, unified by a clear message, are applicable to the contemporary debate, teaching that, while free market fundamentalism will fail,[4] so too will socialism. "Too much" capitalism is as bad as "too little." Pragmatic, progressive capitalism, which both Brandeis and Stiglitz advocate, is the key to striking the balance. The challenge posed by the digital revolution at its quarter-life crisis (critical juncture, turning point), is great, but the U.S. has already developed a model that worked in the past and can work in the future. Pragmatic, progressive policy to govern the capitalist economy is, once again, vitally necessary to create and sustain the conditions for market success.

UNDERSTANDING THE REMARKABLY SUCCESSFUL UNIQUELY AMERICAN POLITICAL ECONOMY OF THE SECOND INDUSTRIAL REVOLUTION

Part II describes the Brandeis Protocol for progressive capitalism as it evolved over his half-century of active involvement in public policy

In a half decade, the U.S. adopted the two pillars on which a uniquely American and remarkably successful political economy was built – the Interstate Commerce Act of (ICA)1887 and the Sherman Act of 1890, These two were quickly extended to the telecommunications sector, which is very much at the heart of the contemporary debate, with the Mann-Elkins Act of 1910 (extending the authority of the ICA to telecommunications), and one of the first consent decrees entered into by the Department of Justice, DOJ v. AT&T, 1913.

These laws were pillars of the American political economy and demonstrate key aspects of the Brandeis approach. I call this approach the Brandeis Protocol, which is made up of 100 progressive policies. These were developed in two periods of his long political life – (Chapter 3) before he was appointed to the Supreme Court (roughly 1880-1916) and (Chapter 4) his quarter of a century on the Court (1916-1938).

The longevity and durability of Brandeis in defining economic policy reflected his:

- commitment to decentralized competitive markets,
- recognition that both regulation and antitrust were necessary to regulate competition
- belief in economic efficiency (i.e., scientific management)
- nuanced and flexible view of economic policy,
- acknowledgement of real-world development within the economy,
- acceptance that there would be a pragmatic process of refinement of these initial steps,
- belief that the nature of the economy demanded industrial democracy
- based on a proper recognition of labor's role in production, and the commensurate wages and working condition that would lay the basis for participatory democracy,
- and the achievement of key social goals including consumer protections, free speech and privacy.

If this all sounds thoroughly modern, there is a simple explanation: it is. **Part III** explore the direct link between Brandeis Protocol for and the Stiglitz model of pragmatic, progressive capitalism. Chapter 4, highlights the fit between the Brandeis Protocol and the Stiglitz model. This should not be surprising, since Brandeis was a primary architect of the late (second) New Deal that Stiglitz shows led to the "Golden Age Capitalism," the quarter century after World War II. Chapter 5 shows that the resulting Brandeis-Stiglitz model of pragmatic, progressive capitalism is consistent with and well-grounded in, a number of analytic frameworks that are "popular" in contemporary economics.

In offering the pragmatic, progressive capitalist model as a basis for learning about how to respond to the challenges of the 3rd (digital) industrial revolution, it is important to show, as **Part IV** does, its success in responding to the challenges of the 2nd industrial revolution. In

Chapter 6, I show the superiority of pragmatic, progressive capitalism's superior economic performance using an econometric analysis. Chapter 7 presents a similar analysis of trends throughout the 20th century,

Throughout this analysis, the primary antagonist and the alternative to pragmatic, progressive capitalism is another diametrically opposed vision of a capitalist political economy that is best described as free market fundamentalism. In contrast to pragmatic, progressive capitalism, which argues for policies to prevent abuse in markets and guide such markets to socially desirable outcomes, free market fundamentalist capitalism argues that the market will fix any perceived problems and that policy interventions will make things worse. Free market fundamentalists want little regulation and very lax antitrust enforcement so as not to constrain business actions. They claim government intervention always makes things worse, and believe (hope) that the pursuit of private interests will promote the public good,

Elsewhere I have analyzed the critique of free market fundamentalism and I will not repeat that analysis here, except in summary tables that highlight the failures of markets that lack guardrails to prevent abuse and guidance from policies that orient behavior in a socially desirable direction. I have explored the issues at a high, theoretical level,[5] as well as a micro/sectoral level, including, in addition to the broad economic performance considered in this paper, policy governing communications (Internet,[6] telecommunications[7]), democratic discourse,[8] energy (energy efficiency,[9] electricity,[10] climate change[11]) public health (pandemic response[12]), and the finance sector.[13] These sectoral studies cover what is generally known as infrastructure [14] – the economy, communications, finance and public health—where policy has long been recognized as necessary, particularly in advanced industrial societies.

The focus of this paper is on the positive accomplishments of pragmatic, progressive capitalism and the guidance these accomplishments can provide for an effective, progressive to contemporary challenges.

Part V consists of three chapters that describe the unique challenges that policy faces in seeking to set the digital revolution in communications on a strong, stable growth path. It shows that the challenge is significant, but pragmatic, progressive principles developed over the course of a century provide a clear road map for responding to the challenges.

Chapter 9 describes the challenges policy faces, emphasizing the antitrust point of view, which is primarily the economic challenge. Antitrust and regulation must break the bonds of lax implementation that has developed over the past several decades, bonds that have grown from a theory that favors highly concentrated markets and dismisses the abuse of market power, at the expense of competition and consumers. The theory, which is a based upon the erroneous assumption market power and its abuse is rare and short lived, has been repeatedly demonstrated to be wrong, it is deeply entrenched in the antitrust courts. The only way to reboot antitrust is through legislation that surgically removes this precedent.

The second challenge stems from the new economic forces and relations that are at the heart of the digital revolution. Ten key factor that underlie the dynamic economic performances of the digital communications sector present new challenges for antitrust and regulation.

Existing regulatory agencies have either been uninterested in dealing with the challenges (because they espouse the same discredited theory) or they lack the legal authority to do so.

The thrust and direction of antitrust rebooting and recalibration set the framework for similar undertaking in regulation of big data platforms, which have the added challenge of creating an entirely new agency.

The "blame" laid at the door of the free market fundamentalism reflects decade of refutation in the economic literature, including rejection of arguments that

- markets self-correct,
- large, monopoly units promote innovation,
- vertical integration creates efficiency,
- harms of market power are small (the single monopoly rent theory) and
- fleeting (undermined by the ease of entry the contestability of markets, which disciplines behavior without actual entry).
- The role of potential competition has been overestimated (the possibility of entry, contestability, is enough so discipline the abuse of market power) and undervalued (actual potential competitors harmed by exclusionary tactics or an artificial or real barrier to entry are given little weight).
- evidence of anticompetitive intent is ignored.

Chapter 10 discusses the broad outlines of reform of antitrust and regulation. Legislation is necessary to reboot and recalibrate antitrust. The irony is that many of the characteristics of digital markets that pose challenges to competition and antitrust are the source of the efficiency of the new form of industrial organization. Regulatory authority faces a third challenge, it is simply absent. This chapter emphasizes the principles that should drive efforts to provide guardrails and guidance for the digital economy. The challenge is to design oversight to prevent these abuses without destroying the underlying dynamic forces at work.

Chapter 11, presents key "dos and don'ts" for rebooting and recalibration that are derived from the analysis of the success of pragmatic, progressive capitalism. It argues that there is a strong basis for imposing oversight that must involve the dual jurisdiction, of antitrust and regulation.

This power and authority must be implemented to preserve the dynamic flexibility of oversight that has typified past success. Expert authorities (antitrust and regulation) must be given clear guidance on the principles to pursue.in their practice, adequate enforcement resources, but they must be provided the flexibility to develop rules and deter harmful practices following fact-based analysis of specific harms. Legislation should use mandates very sparingly, since dynamic development within the digital sector are likely to quickly render any mandate obsolete.

SUMMARY OF RECOMMENDATIONS

The policy principles needed today to prevent both the big data platforms and big broadband networks from strangling and distorting the development of the digital communications sector, are the same principles applied to ensure the success of the 2nd industrial in America at the same point in its development over a century ago. Of course, the details of the policy change with the technology, but the principles (outlined in Chapters 3-6) are the same. The Brandeis-Stiglitz model of pragmatic, progressive capitalism meets the challenge.

- It seeks to construct guardrails and guidance to promote competition and innovation in decentralized markets and orient capitalism in a direction that promotes and furthers the fundamental economic, social and political values of society, while ensuring consumer benefits and providing consumer protection.
- The process must be pragmatic and flexible to accommodate the dynamic economy, based on analysis of the real-world functioning and impact of each sector, implemented by experts who have not only the skill, but the authority and resources to implement policy to pursue the goals.
- Political developments should be democratic and participatory, endeavoring to have political development support the evolving economic structure.

Table 1.1 uses the issues identified by the Stigler group (shown in the left-hand column), to organize the discussion of policy responses shown in the two right hand columns. It underscores the need for a complex approach to the oversight of the revolution wrought by digital technology. Many of the details must be worked out through antitrust and regulatory practice, with clear statements of goal, and identification of the factors to be considered.

- Common law is the basis for Antitrust; it should be the basis or regulation
- Clear obligations should be imposed, e.g. a duty to deal (nondiscrimination)
- Statutory and precedential obstacles to vigorous enforcement by antitrust and regulatory agencies should be removed
- Statutory mandates should be avoided, but oversight authorities should be allowed to impose "strict" prohibitions where evidence justifies such actions
- As a starting point, Utility-like regulation is too restrictive on entrepreneurial activity, while horse and buggy competition misunderstands the nature of the technology and minimum efficient scale
- The discussion of regulation also suggests a "new" form of participatory governance, to enhance the involvement of citizens in ruling, which is a clear update of Brandeis' support for industrial democracy.

By articulating the logic of progressive capitalism and demonstrating its success over the course of a century, this paper endeavors to give the electorate confidence in the understanding that we do not need to reinvent or reimagine capitalism, which is why I use the word "reintroduction" in the title of this chapter. Rather, we simply need to rediscover what was successful in our own history and adapt the approach that worked so well during the 2nd Industrial Revolution, to the 3rd. Dramatic change is necessary to meet the challenges of the transforming the political economy under the digital revolution, but that does not mean the 3rd Industrial Revolution should (or even can) be stopped. Its worst tendencies can and must be tamed in a policy framework Brandeis called "regulated competition." The long history shows that the model of pragmatic, progressive capitalism has not only been remarkably success over a century and a half, it is also uniquely American.

TABLE 1.1: OVERSIGHT OF BIG DATA DIGITAL PLATFORM, ANTITRUST REFORM AND A NEW REGULATORY AGENCY

CHALLENGES OF NEW TECHNOLOGY	STIGLER GROUP ON ANTITRUST AND REGULATION ANTITRUST REFORM	A NEW REGULATOR
Market Characteristics that increase surplus but weaken competition		
(1) Average cost is too low (2) Quality costs are too high (3) Transaction costs are too low (4) Advertising costs are too low (5) Advertising value (targeting) with large databases is too effective(for some/many) (6) Consumer preference v. consumer welfare (7) Increased output v. allocation of output (8) Direct network effect value for communications consumers is too (9) Indirect network effect value to producers of complements are too large (10) Local/global expansion costs are too low	Understand innovation process better (P) Recalibrate perception of risk, false positive v. false negative (P) Speed oversight by shifting burden, evidentiary presumptions, decision frameworks in merger review (L) Clearer thresholds (P) Attention to small firms (L) & Reconsider duty to deal (P) Data barrier to entry (i.e. portability) Separation of data	*Ex ante*, forward looking rules preempt harmful effects Complementary role Speedy deadlines, lower burdens, joint responsibility especially for behavioral remedies Clearer boundaries of unacceptable conduct potential leapfrog competition (P) Data portability (with consideration for data protection)8. Separation of data Study implications of multi-sided
Traditional conduct that reinforces market power		
On the supply-side (11) Limit openness and interoperability (12) Lack of transparency (13) Exclusion or degradation of services (14) Resist data portability (15) Consumer exploited by behavioral economics (16) Complex, opaque transactions On the demand-side (17) Pricing (loyalty and to zero) (18) Contracts (19) bundling (20) Lack of transparency (21) Increasing switching costs (22) Magnifying switching cost through sunk costs and asymmetric information	Supply-side In light of competitive, reexamine: pricing (e.g. zero and loyalty discounts) product design in light of competitive effects (P)	Demand side Prohibit terms raising switching costs (take it or leave it contracts) Unbundling, maximize consumer choice
Consumer behaviors that contributes to entry barriers abuse by dominant firms		
(31) Inherent behavioral biases (24) Data is open to manipulation & exploitation (25) Manipulation of Consumer preference v. welfare (26) Machine learning is uniquely powerful (27) Lack of availability of Information (28) Failure to research and compare	Understand barter better (P) Understand behavioral biases & their exploitation (P) Understand conflicts of interest in multisided (P)	Date Protection Agency Fair information practices Effective choice Algorithmic transparency Define & enforce effective consumer choice
Policy that facilitates or fails to address market power		
Lax antitrust enforcement (29) Structure (mergers) (30) Conduct (fraud and abuse) Lack of regulatory authority (31) Ineffective (privacy) (32) Absent (big data exploitation) (23) Severe challenge of assessing consumer welfare (34) Political impact of weak antitrust & absence of regulation	Multiple agency oversight of mergers (L) Protect competition (L) Need to become more aggressive In enforcement (P)	Multiple agency oversight of mergers Promote competition, monitoring and enforcement of behavioral remedies and firewalls Open standards and interoperability Experience with active, *ex ante* preventions of discrimination, limits on market power, define and break bottleneck power and foreclosure, Non-competition digital goals: experience with universal service, local and diverse ownership, customer proprietary network information New roles in data use restrictions, consumer protection, Procompetitive rules for consumer control of personal data Algorithmic oversight

S0urces: *Stigler Committee on Digital Platforms,* April 2020

2. FROM BRANDEIS TO STIGLITZ AND INTO THE 2020 ELECTION

A BRIDGE FROM BRANDEIS TO STIGLITZ AND THE TERRAIN OF THE CONTEMPORARY DEBATE

This chapter describes the framework for the analysis and implementation of pragmatic, progressive capitalism. Building a bridge between Brandeis and Stiglitz may seem easy, given that Stiglitz says, "I present a progressive agenda…that is, in sense, a twenty-first-century blend of Teddy Roosevelt and FDR…that…will lead to a faster-growing economy, with shared prosperity…which is not a pipe dream but an attainable reality."[15] However, there are obstacles that must be carefully negotiated to ensure the sturdiness and usefulness of the bridge.[16] Above all, the bridge needs to be between early Teddy and late Franklin. This recognizes Brandeis's criticism of Teddy's "regulated monopoly" in the 1912 election and his rejection of the extreme centralization (state capitalism) of the early New Deal.

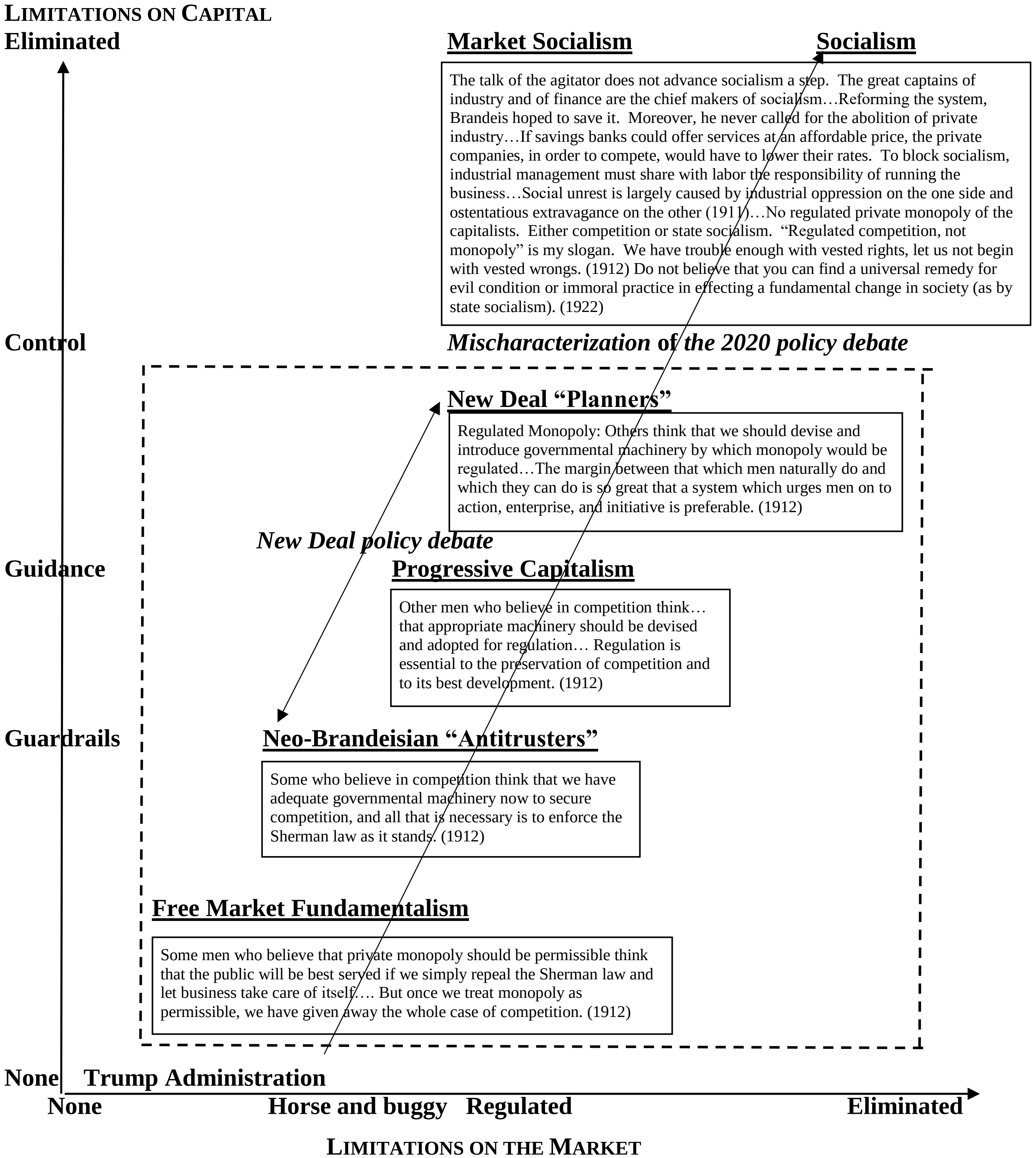
In this Chapter, I draw a map of the terrain of debate over political economy where I locate the Brandeis-Stiglitz framework of pragmatic, progressive capitalism. I develop the more subtle nuances necessary to build the bridge between Brandeis and Stiglitz after I describe what I call "the Brandeis Protocol for progressive capitalism." This is the launchpad for demonstrating that the political economies that have dominated the past century and a half in America are the same political economies competing for center stage in the 2020 election

Each of those political economies can be simply defined by its attitude toward markets and capital. On the x-axis, I show the limitations placed on the market, from none to its elimination. On the y-axis, I show the limitations placed on the role of capital, again ranging from none to its elimination. The quotes in the boxes in Figure 2.1 are largely from articles and testimony by Brandeis during the 1911-1922 period. Figure 2.2 gives Stiglitz's definitions of the main competing political economies roughly 70 years later. As shown in Figures 2.1 and 2.2 Brandeis and Stiglitz rejected the major alternative models of political economy that competed for support during their lifetime.

Stiglitz has launched a campaign that reacts against the conservative, election-year criticism that mischaracterizes any and every progressive policy as socialism. His critique of Thomas Piketty's *Capital*, captures the essence of this complaint and the need for a balance of progressive policies and markets.

> Taken together, these proposals would make real inroads into reducing inequality, returning us to an economy more like that of the post-war years. Those were the years when America was becoming the middle-class society it had long professed to be, with decades of rapid growth and widely shared prosperity, when those at the bottom saw their incomes grow faster than those at the top. They are also the years that Thomas Piketty views as an anomaly in the history of capitalism. But getting back to that time doesn't require eliminating capitalism; it requires eliminating the market distortions of the ersatz capitalism practiced in this country today. This is less about economics than it is about politics. We don't have to choose between capitalism and fairness. We must choose both.[17]

FIGURE 2.1: TYPOLOGY OF POLITICAL ECONOMIES: BRANDEIS DESCRIPTIONS, 1912



Sources: Louis Brandeis, (1912) "*Competition*; (1911) Testimony before the *U.S. House Committee on Interstate Commerce*: (1922) *The Document.*

FIGURE 1.2: TYPOLOGY OF POLITICAL ECONOMIES: STIGLITZ DESCRIPTIONS, 1980-1990

Eliminated

Socialism

Socialism as an economic doctrine – the belief that simply by changing the nominal ownership of the means of production (or the means of production in certain vital industries), economic efficiency and broader social goals will be attained – is not dead. (State, 57)… At the core of the failure of the socialist experiment is not simply the lack of property rights. Equally important are the problems arising from lack of incentives and competition, not only in the sphere of economics, but also politics. Even more important, perhaps, are problems of information. (Socialism, 14)

Market Socialism

Market socialism, in assigning to the government the responsibility for running "markets" (or "as if" markets) when such markets did not function well in the private sector, did not resolve these problems. The theory of market socialism…was not based on an analysis of these market failures, but rather the naïve comparison of the actual performance of market economies and the hypothesized performance of a market socialist economy, with an idealized view of government. (Socialism, 44) Market socialism underestimated the significance of the incentive problem…the difficulty of making a "full-pricing" system work…and the role of nonprice allocation mechanisms…the difficulty of allocating capital… misjudged the role and function of decentralization and competition…and simply ignored the role of innovation in the economy. (Socialism, 66)

Control

Central Planning

Doctrinaire positions on the left that call for increased government intervention, idealize the government, anthropomorphize it as a single individual (benevolent despot), and attribute failures to the particulars of the situation…without recognizing the limits of government are also not very helpful. (State, 57)…Given the pervasiveness of increasing returns, the relevant comparison was not between market socialism and competitive markets, but between market socialism and monopoly capitalism. (Socialism, 15)

Guidance & Guardrails

Progressive Capitalism

At the core of the success of market economies are *competition, markets,* and decentralization. It is possible to have these and for the government to still paly a large role in the economy. Indeed, it may be necessary for the government to play a large role if competition is to be preserved. (Socialism, 13-14)
I am advocating here an eclectic position…Governments will intervene when markets fail to meet social needs, and the economists' role is to guide them to understanding when and how government intervention is most likely to be helpful. (State, 56-57)
There are many circumstances in which naturally monopolies arise, but in these circumstances, when the incumbent is efficient, three is a natural barrier to entry. The government does not need to augment this with an exclusive license. Even if entry occasionally leads to duplication and waste, those costs are almost surely less than the benefits that potential (and actual) competition may bring. (State – 57)

Guardrails

NeoBrandeisian "Horse and Buggy"

Markets do not work perfectly when there are important externalities…cannot provide public goods…distribution of income may not be socially desirable…It might also be necessary to ensure that markets are actually competitive… The informational problems that the competitive market economy handles efficiently are extremely limited. (Socialism, 7-8)

Free Market Fundamentalism

Doctrinaire positions on the right saying that government intervention is welfare-decreasing in all circumstances, governments are inherently wasteful, and attempts at redistribution simply give rise to rent-seeking activities are both wrong and unhelpful. (State 56-57) The standard neoclassical model…provides little guidance for the choice of economic systems since once information imperfections (and the fact that markets are incomplete) are brought into the analysis (as surely, they must be), there is no presumption that markets are efficient. (Socialism, 13)

None **Trump Administration**

None | **"Horse and Buggy"** | **Regulated** | **Eliminated**

LIMITATIONS ON THE MARKET

Sources: Joseph Stiglitz, *Wither Socialism* (MIT Press, 1994), *The Economic Role of the State*, Arnold Heertje, (Ed.) (Basil Blackwell, 1989)

On the extreme political right (lower left on the graph), we find market fundamentalists who argue that the market will fix any perceived problems and that policy interventions will make things worse. On the extreme political left (upper right on the graph) are socialists who rely on extensive administrative controls. They dramatically reduce, if not eliminate, the role of the market and capital.

In the middle I distinguish pragmatic progressive capitalism from two other political economies that were hotly debated and active in the New Deal. On the one hand, we find central planners, who wanted to actively control economic units. On the other hand, we have advocates of a "horse and buggy" economy.

I use the term "horse and buggy" competition to reflect FDR's complaint that this was the economy to which he was doomed, when the Supreme Court unanimously (i.e. including Brandies) rejected the early (First) New Deal. The late (Second) New Deal, which Brandeis fully supported, proved FDR wrong. It was not the size of the units that mattered, as much as the oversight to which they were subject. The vigorous antitrust enforcement of Thurmond Arnold and the new regulatory institutions of the Second New Deal showed that you did not have to go back to the small units of the 19^{th} century to have a dynamic, progressive economy.

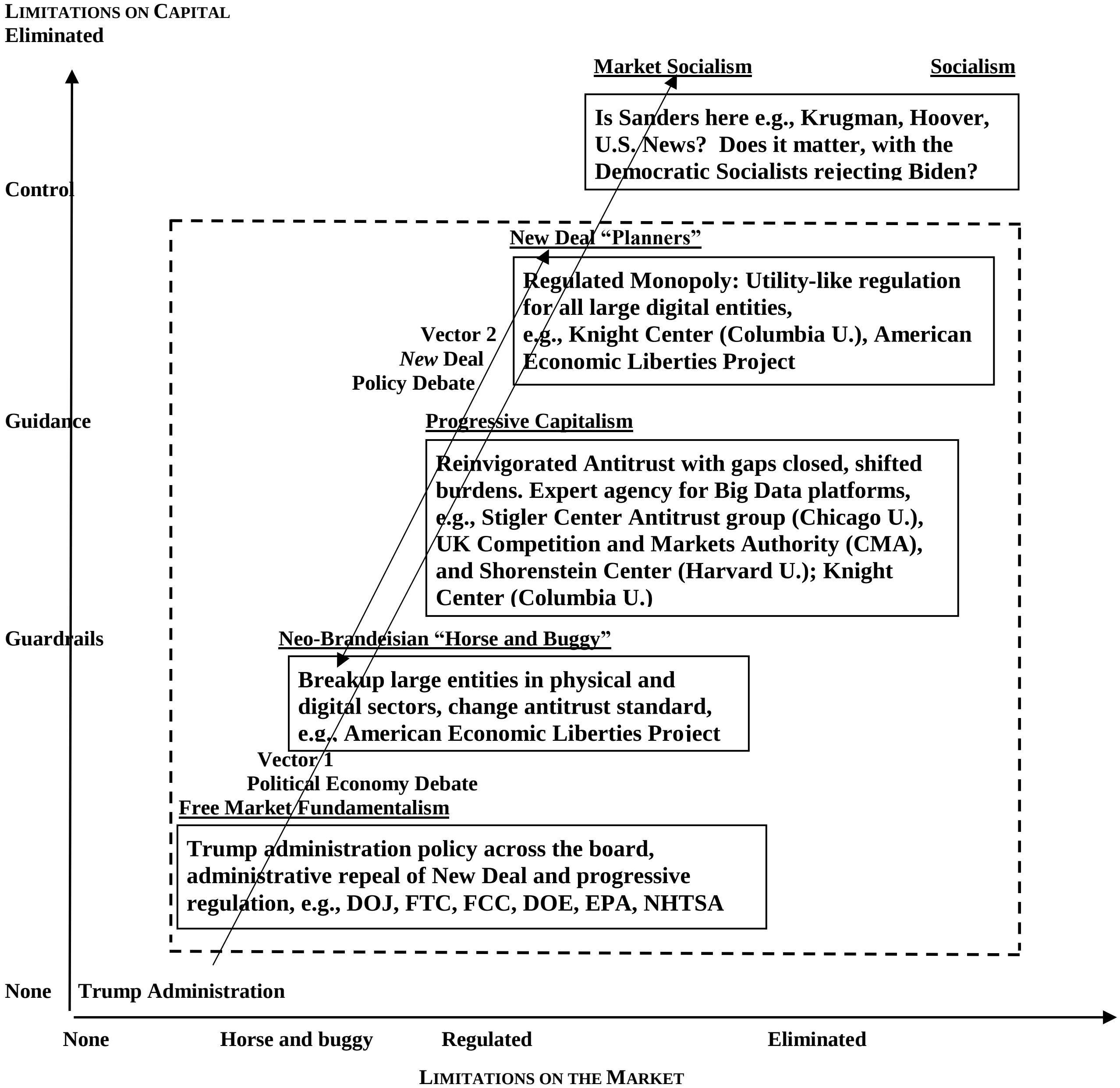
The challenge that pragmatic, progressive capitalism faced in the Great Depression are identical to the challenges we face today. How do we provide guardrails and guidance to the extremely efficient units of industrial organization, while still producing economic progress? Both Brandeis and Stiglitz accepted and proved that one could have large units in decentralized, competitive markets and socially desirable outcomes, as long as society imposed the appropriate guardrails and guidance for economic behavior. The terrain of political debate today is virtually identical to the debate that took place over 100 years ago (highlighted in the 1912 election), as described in Figure 2.3. Two vectors of debate are identified across the past century.

THE 2020 DEBATE OVER POLITICAL ECONOMY

This paper shows (in Figures 2.3) that the framework for defining political economies, especially pragmatic, progressive capitalism that strongly links the work of Brandeis and Stiglitz, also applies to the contemporary debate over political economy as it is being expressed in the 2020 election. The first vector is between conservative, free market fundamentalism – defined over the years as neoclassical, *laissez-faire*, neoliberal, or "trickle-down" economics – and progressive capitalism. Stiglitz argues that the market fundamentalists have always mischaracterized progressive policy as socialism.

The second vector of debate is among progressives. It concerns how to best address the problems that inevitably arise in poorly regulated capitalist markets. On one side of this debate are those who argue that horse and buggy competition, achieved by a new approach to antitrust that breaks up all large entities, is what is needed. On the other side are those who argue for "utility-like" regulation of all large, essentially monopoly digital networks and platforms. This paper shows that Brandeis and Stiglitz are in between, each arguing that decentralized competition in markets is essential to economic as long as policy sets guardrails and provides guidance for the market.

FIGURE 2.3: THE PAST AS PROLOGUE: THE CURRENT DEBATE OVER POLITICAL ECONOMIES



Sources: Socialism: Paul Krugman, "Bernie Sanders Isn't a Socialist," *New York Times*, February 13, 2020; Paul R. Gregory, "How Socialist if Bernie Sanders?", *Hoover Institution Journal*, May 2, 2019; Jason Lemon, "Bernie Sanders is a Democratic Socialist, Not a Communist, Here's the Difference, *U.S. News*, February 3, 2020; Andrew O'Reilly | Fox News, Democratic Socialists of America won't endorse Biden's White House bid, April 12 New Deal Planners, Knight Center: K. Sabeel Rahman and Zephyr Teachout, *From Private Bads to Public Goods,* 2020.
Progressive Capitalism: Knight Center, Evelyn Douek, *The Rise of Content Cartels,* 2020, Ellen Goodman, *Digital Information: Fidelity and Friction,* 2020; UK Competition and Markets Administration, *Online Platforms and Digital Advertising,* 2019; Shorenstein Center: Gene Kimmelman, *The Right Way to Regulate Digital Platforms,* September 18, 2019, *Key Elements and Functions of a New Digital Regulatory Agency,* February 12, 2020, Stigler Center: *Stigler Committee on Digital Platforms,* September 2019. Neo-Brandeisian Antitrusters: Sarah Miller, *American Economic Liberties Project* (David McCabe: "She Wants to Break Up Big Everything," *New York Times,* February 12, 2020.

Taking this view highlights not only that Brandeis and Stiglitz are strong believers in decentralized competition and markets, but also that they were well aware of the limits of competition and antitrust. They believed that a great deal of regulation is necessary to ensure good market performance, that economic complexity challenges antitrust authority, and that effective oversight is necessary to prevent abuse.

Second, while the debate between free market fundamentalism and pragmatic progressive policy is strongly in favor of the latter, there is a second vector of debate that clouds the issue. There are very nuanced positions once one moves away from the extremes. Pragmatic, progressive capitalism is squarely in the center of this second debate. This central location invites complaints that its reliance on competition, markets and capitalism is too great from the point of view of the left and too little from the point of view of the right. Stiglitz rejects these criticisms as misrepresentations.

The analysis provides what I believe is a coherent theoretical framework and compelling empirical evidence for the idea that the pragmatic, progressive capitalism has not only been successful but is also as American as apple pie. This combination makes pragmatic, progressive capitalism an important source to draw on in crafting policies to deal with the new, digital economy.

Notwithstanding the effort to dysphemize every progressive idea as socialism in the 2020 election, or perhaps because of it, it is critically important to distinguish pragmatic, progressive capitalism from the other political economies competing for center stage. [18] For much of the 20th century, the debate took place within the confines of the box outlined in dotted lines.[19] Brandeis made a sharp distinction between regulated monopoly and regulated competition in the 1912 election. He pursued that distinction until he retired from the Supreme Court a quarter century later, after having deeply affected the structure of the New Deal with his early dissents and later concurrences.

Figure 2.1 includes two other political economies from the later Brandeis era. The New Deal witnessed a debate between "planners," who Brandeis thought were taking the regulated monopoly view, and neo-Brandeisians, [20] who argued that extreme antirust implementation would unleash market forces sufficient to accomplish the goals of a progressive political economy. Stiglitz thoroughly rejects and debunks the market socialist claim that markets without capitalists will deliver better performance. [21] Instead he emphasizes market capitalism subject to strong progressive policy guardrails and guidance, as did Stiglitz. Stiglitz also clearly rejected the extreme political left (upper right on the graph), socialists who rely on extensive administrative controls. They dramatically reduce, if not eliminate, the role of the market and capital.

This paper focuses on the second (and in some senses, more important) vector of analysis shown in Figure 2.1. As illustrated in the figure, there was a debate within the New Deal between the neo-Brandeisian anti-trusters and the economic planners. [22] Given that debate and its continuation in the 2020 election, this paper asks the question raised by the second vector: exactly what system do we claim is superior to free market fundamentalism and market socialism? The answer is the American model of pragmatic, progressive capitalism developed in response to the 2nd Industrial Revolution and advocated by both Brandeis and Stiglitz. It is not horse and buggy competition, as the neo-Brandeisians seem to suggest. It is also not the utility-style regulation of many sectors (dynamic, in particular), as the extreme regulators demand. It is definitely not socialism or its market socialist variant, as market fundamentalists like to misrepresent progressive capitalism.

Brandeis and Stiglitz argue that to succeed, a political economy has to be based on competition, markets, and decentralization – the antithesis of socialism. They also suggest that, for the political economy to succeed, the competition and markets upon which it is based must be set in a framework of strong policy in order to build guardrails and give guidance to capitalists and markets – the antithesis of free market fundamentalism. The combination of these five principles (competition, markets, decentralization, guardrails, and guidance) created the most successful political economy in the U.S.

Stiglitz's critique of Thomas Piketty's *Capital,* which holds an important place in the debate, captures the need for this understanding and the need for a balance of progressive policies and markets.

> Taken together, these proposals would make real inroads into reducing inequality, returning us to an economy more like that of the post-war years. Those were the years when America was becoming the middle-class society it had long professed to be, with decades of rapid growth and widely shared prosperity, when those at the bottom saw their incomes grow faster than those at the top. They are also the years that Thomas Piketty views as an anomaly in the history of capitalism. But getting back to that time doesn't require eliminating capitalism; it requires eliminating the market distortions of the ersatz capitalism practiced in this country today. This is less about economics than it is about politics. We don't have to choose between capitalism and fairness. We must choose both.[23]

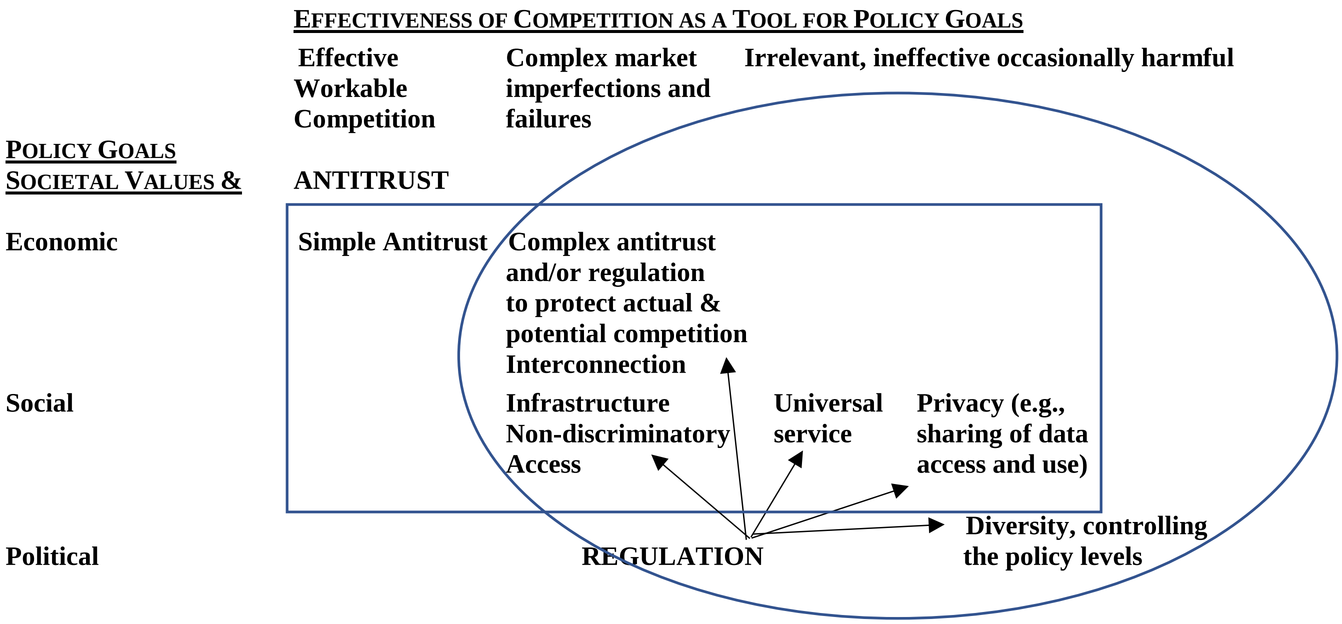
This paper begins with the extensive set of progressive policies advocated by Brandeis, referring to them as the "Brandeis Protocol" for progressive capitalism. Table 3.1, below, identifies 100 specific policies that constitute the Brandeis Protocol for progressive capitalism. These are based on original sources from 1911-1922. The appendix to this chapter identifies other third-party sources I relied on to create this table.

RECOGNIZING THE IMPORTANCE AND LIMITS OF COMPETITION AND MARKETS

Framed in this way, a central concern of pragmatic, progressive capitalism is the ability of, and conditions under which, competition can produce the desired market performance. While the 3rd industrial revolution involves new challenges in the contemporary environment as it transitions to a digital economy, the challenges are not unique. Similar challenges have been encountered and overcome before because they are part and parcel of the process of technological revolution, which has profoundly improved the economy over the last quarter millennium.

Figure 2.4 identifies the limits of competition, markets, and antitrust. Economic complexity challenges antitrust authority and implementation. It shows what the market can and cannot do in the economy without strong policy oversight. Moreover, there are social goals like universal services (where the people and places to be served are not sufficiently profitable to attract capital at affordable prices) or intrinsic values (like privacy and non-discrimination) and political outcomes (like diversity and the opportunity to speak) that are not well supported by pure market forces.

FIGURE 2.4: LIMITS OF COMPETITION & ANTITRUST IN ACHIEVING ECONOMIC, SOCIAL, AND POLITICAL GOALS



To make matters worse, political power magnifies the harmful effects of unregulated markets. Dominant firms undisciplined by policy or market forces have perverse incentives to make investment and pricing decisions that maximize their profits and undermine competition. They will use their market power to politically bend the rules to their advantage at the expense of the public interest.

The contemporary debate is likely driven by a number of factors. Free market fundamentalism moved to the fore during the rise of neoliberal dominance in the 1970s and 1980s. The Trump administration's militant version of free market fundamentalism, lodged as far down in the market fundamentalist corner as we have seen in half a century (or even a whole century), takes market fundamentalist policy to an extreme. Of course, the prominence of self-declared socialists in electoral politics has played a part. By advocating for a balance of reliance on markets and regulation governed by progressive policy, Brandeis and Stiglitz argued for a middle position.

This position is easily lost in the din of debate because people tend to gravitate toward simple solutions (unfettered markets with capitalists or eliminated markets and socialism). But as Brandeis and Stiglitz argue, and as Stiglitz shows, real-world experience strongly supports the middle position. Exactly how to strike the balance between public and private interest in progressive capitalism remains hotly debated, but this debate exists within the confines of competition, markets, and decentralization.

PART II:
THE BRANDEIS PROTOCOL FOR PRAGMATIC, PROGRESSIVE CAPITALISM

3. THE BRANDEIS PROTOCOL FOR PROGRESSIVE CAPITALISM: THE ECONOMIC, SOCIAL, AND LEGAL BASIS FOR REGULATED COMPETITION

BRANDEIS SOURCES

I have borrowed the term "protocol" from an effort by Brandeis to arbitrate a 1911 strike by the International Ladies Garment Workers Union (ILGWU) at a key moment halfway through his public policy life.[24] He had been taking public policy positions for about 30 years in various state, local, and congressional proceedings. The next year he would aggressively campaign for Woodrow Wilson and frame his approach in a series of articles and speeches that drew a sharp distinction between competition and monopoly.

The specific elements identified in Table 3.1 are built up from an extensive review of two different types of sources. The sources reviewed include key original writings in his very long list of articles, testimony, and court decisions. The sources included in Table 2.1a are based on three books, which were collections of articles Brandeis published in a short period from early 1912 to early 1913.

The "competition papers" were collected in a 1934 volume entitled *The Curse of Bigness,* which makes it clear that size was only one issue in his very complex analysis. "The Regulation of Competition Versus the Regulation of Monopoly" was delivered just five days before the 1912 election. An earlier article with similar intent, "Shall We Abandon the Policy of Competition?" was published in February of that year. A later, longer piece called "Competition," which Wilson apparently asked for, was published in January 1913.

The second source is a collection of articles on banking and the trusts, many of which were published during the presidential campaign. These were gathered in a longer publication entitled *Other People's Money and How the Bankers Use It,* which underscores not only how important it was to break up the trusts, but also how important finance is to the success of industrial capitalism.

The third source is a work entitled *Business – a Profession.* Although the first article is about the social and economic obligations of business, which were important to Brandeis to build a stable, expanding capitalist economy in the industrial age, the next seven articles are about how business should treat labor, and what labor should do to drive implementation of that treatment. I include scientific management under the "Labor" heading of Table 3.1 because Brandeis was adamant that, properly done, it is the key to progress for labor. He spent immense energy skewering capitalists for failing to adopt the principles of scientific management. That point was easy enough, but it was much more difficult for him to espouse scientific management for – and specifically, over the objections of – labor. Still, he never wavered.

After the labor discussion and discussion of trusts in the "Profession" paper, which replicates other sources, he turns to questions of lawyers and the law. This fits well within the theme of how institutions and individuals should behave in industrial society. In other words, Brandeis outlined the necessary roles and behaviors for capitalists, labor, and lawyers to make industrial society expand output and meet not only the economic needs of people, but also their political and social needs.

TABLE 3.1: THE BRANDEIS PROTOCOL FOR PROGRESSIVE CAPITALISM

	Economic Fundamentals	Money	Competition	Profession		Political Fundamentals	Money	Competition	Profession
1	Capital/Free markets	2,8,18,45-47	109, 122-123		49	Democracy & competition	I, 2, 8, 17, 31-35	114, 121	4-5, 7, 41
2	Fairness & equal opportunity		110		50	Civil Rights (Gender)			
3	Industrialization>Globalization		109		51	Education	43	124	11, 12, 14
4	Inequality			41	52	Partcipation			7, 11
5	Efficiency	21	109		53	Responsibility of Citizans	2-5, 37		10-11, 14
6	minimum scale, diseconomies		117		54	Unaccountable power	16-17, 21	74	
7	Competition	2, 16	109, 123		55	Speech	32		
8	Yardstick competition				56	Privacy			
9	Innovation	51-52	110, 116	1, 4	57	Law			
10	ConcentratIon/Trustbusing	2, 10, 11	109	2	58	the public interest, pub. Private Law	20, 21		
11	Vertical Integration	2, 9, 54			59	Lagging Law (common)			38, 41-42
12	Collusion	i,			60	due process			
13	Unaccountable Power		110	38	61	Lawyers			2
14	Big Banks, Intermediation	I, 1,-3, 39, 45	124		62	Obligtions of a Professions			2,3
15	XS Financialization	8, 13, 35 57			63	Inherent Qualities			3, 42
16	Conflict of Interest	4, 18-21, 69	110		64	Fialure in Capture			34, 42
17	Denial of Access to Capital	2, 5, 17, 22, 53			65	Living Law			39
18	Access to information	3, 34, 36			66	Social Science			37-38
19	Anticompetitvie impacts:	3, 8, 9, 16, 21, 57			67	Threat			38
20	Excessive pay, fees charges	8, 9, 32-35			68	Lagging Law			38, 41-42
21	Price, service	21	109		69	Pragmatic Process			
22	Taxation				70	Law & Reality			
23	**Political Economies**		12, 13, 16		71	Facts (Brandeis Brief)			
24	Progressivism				72	Flexibility (evolutinary)			38
25	Socialism				73	Experimentation/Federalism	cooperative		
26	Conservatism				74	Restraint & Responsibiity			
27	New Deal				75	Judicial			
28	**Labor**		111		76	Presidential			
29	Living Wage/Poverty			3, 11, 12, 20, 23	77	**Regulated Competition,** Institution building		112, 116	
30	Unrest				78	Antitrust	56	113	
31	Unions				79	Sherman Act			
32	legality		114	7, 8	80	new agencies (FTC)		113	
33	responsibiity (incorp)			9, 34	81	Regulation	23-25, 29		
34	Conditions, (hour, wages, reliability)		111		82	Authority, power & tools	23	113, 115, 124	
35	Self-gov't./			5	83	Uniqueness of war			
36	Collective Bargaining			18	84	Police power	23		
37	Arbitration			5	85	Power to tax new	30		
38	hours, wages			5	86	Mail	30	114	
39	reliability			3, 13	87	Interstaate Commerce	30		
40	Cooperation			2, 8	88	Economic	2-3, 29, 39-40		
41	shop				89	New/expanding (Fed. Reserve,ICC)	24-25, 39		
42	profit sharing				90	Trade & Curreny	22		
43	reliability				91	Infrastrcture			
44	insurance			27-31	92	Utilities	11, 22		
45	Scientific Management	i, 47	117, 121	4, 8, 19	93	Workplace			27-28
46	Cost Savings			24	94	Workers Comp.			27-28
47	Social challenges			1, 3	95	Health, safety		114	
48	Surplus			14 - 15	96	Investor Protection	29, 36-37		
					97	Public Provision	7, 22, 30, 40		
					98	Public Fnance	44		
					99	Public works			
					100	Public Lands			

Sources:

Money = *Other People's Money – and How the Bankers Use it*, (Louis D. Brandeis School of Law Library, 1914)

Competition = Louis Brandeis, "Competition," in Osmond K. Fraenkel (ed.), The Curse of Bigness: Miscellaneous Papers of Louis D. Brandeis, (1935),

Profession = *Business, A Profession* (Louis D. Brandeis School of Law Library, 1914)

My interpretation of these sources is influenced by several major third-party analyses of Brandeis's work, which are identified in the appendix to this chapter. Two lengthy, detailed biographies are included – one very early (Mason, 1945) and one much more recent (Urofsky, 2009). Both are thick with direct quotes from private and unpublished original sources, which makes them close to original (though there is certainly some subjective selection and interpretation involved). Four specialized works are also included on specific areas that Brandeis deeply influenced– Berk's *Regulated Competition,* Purcell's *The Progressive Constitution,* Strum's *Democracy,* and Sallet's *Louis Brandeis: A Man for this Season*. I rely on two sources (not shown in the appendix) for interpretation of aspects of the New Deal – Hawkins' *The New Deal and Monopoly* and Schlesinger's *The Politics of Upheaval* (1960).

100 ELEMENTS OF THE BRANDEIS PROTOCOL

The protocol that ended the strike had attributes that typified Brandeis's thinking and behavior beyond his support for the union. The protocol was unique in the sense that it dealt with efforts to create industrial democracy (and therefore a proper role for labor and cooperative labor-management relations) in a context where workers were often dispersed in small shops rather than concentrated in large factories. In an effort to peacefully resolve disputes, he advocated positions that unions resisted and offered alternatives to union demands (e.g., the preferential shop rather than a closed shop).

At the same time, he supported union demands on hours and wages, advocated democratic participation in the polity as well as industrial democracy. He blamed violence on capitalists who had failed to recognize the legitimate needs and demands of unions. He also advocated for labor-opposed positions that had profound implications for labor-management relations, like scientific management. Still, he agreed to be the arbitrator – one of the union demands – in part because he saw it as a pragmatic step toward a larger solution that required cooperation between capital and labor.

These materials do more than inform us about the substance of progressive capitalism as Brandeis saw it. They also tell us about the man himself. He saw progressive capitalism as a non-partisan issue, beginning his efforts on the national stage by vigorously supporting a Republican Progressive, La Follette. Ultimately, he supported Wilson in the 1912 election and framed the contrast between Wilson and Roosevelt in the stark terms of regulated monopoly (Roosevelt) versus regulated competition (Wilson). He continued to support bipartisan legislation that implemented his vision. While his political advocacy was cut short by his appointment to the Supreme Court in 1916, his efforts to move policy in a progressive direction continued unabated on the Court until the end of the New Deal, which was deeply influenced by his early dissents and later orders.

Table 3.1 divides the specific progressive policies into two broad categories. Economic fundamentals include capital and labor. I include references to various competing political economies under this heading. Political fundamentals include two categories: democracy and regulated competition. The democracy category includes Brandeis's broad views on democracy and a pragmatic approach to law and legal practice. Institution building is premised on the belief that society creates the context in which capitalist markets and a democratic polity exist. This category includes general principles of antitrust and regulation, as well as examples of the sector-specific regulation Brandeis sought, and finally, his advocacy for public provision of resources in certain cases. Many of these policies would be refined over the course of half a century as they confronted industrial society's continuous development and complexities.[25] Still, Brandeis's adherence to the essential progressive principles remained clear.

The citations in the detailed biographies compiled by Urofsky and Mason exhibit an important, repeated pattern in Brandeis's policy positions across many of the broadest and most significant issues. First, at the end of the 19th century, we find a statement of principle developed in a real-world case or proceeding that occurs at the local or state level. This is followed by a broader policy articulation in national politics during the first two decades of the 20th century leading into a decade and a half of activity on the Supreme Court and of enacting national policies.

The three decades from the early 1880s to mid-1910s, best described as the Progressive Era, saw policies articulated not just in theory but also in practice. As an advocate, Brandeis pushed policy makers to adopt progressive policies in every forum (legislative, administrative, and judicial) at every level (federal, state, and municipal). As a member of the Supreme Court, he was a central figure in shaping pragmatic, progressive American capitalism, with dissents in the 1920s and early 1930s, and concurrences in the later 1930s.

This unique view of political economy – an embrace of free markets based upon a dramatic turn toward progressive policies – led Brandeis into a series of conflicts, some predictable and others very unexpected. The charge of a "curse of bigness," which he levelled against giant corporations in industry and finance who had come to dominate key aspects of the economy during the early phase of the 2nd Industrial Revolution, also applied to big government.

Understanding this, Brandeis steadfastly opposed the early (First) New Deal, voting with the conservatives against a big government that sought to replace the market with central planning rather than restore free markets with strong oversight.

The first two original sources call attention to big business (industrial trusts and banks), but the "curse of bigness" was nuanced and pragmatic for both Brandeis and Stiglitz, and it applied to both government and business. Government could be too small; in which case it would not control abuse. Government could be too big; in which case it would stifle markets. The efficient scale of government proved to be large and only grew larger as the 2nd Industrial Revolution penetrated society.

Controlling size was important, but it was part of a very rich and nuanced view of political economy.

- The "curse of bigness" afflicted government as much as business.
- Size alone was not the issue; efficient scale was. Units that were either too small or too big posed a problem.
- Smaller units and more local oversight were certainly preferable in Brandeis's opinion, but large industrial organizations were inevitable, which compelled him to think about industrial democracy.

- Regardless of what could and had to be done to exorcise the "curse of bigness" in business and government, there were in excess of 95 other elements of the progressive protocol that needed the attention of policymakers.

As a devout political economist, Brandeis believed free markets and democracy went hand in hand, and that both could only survive if they were based on human dignity and improving material conditions for the working class. Freedom and responsible democracy rested on the ability of citizens to fully participate in political life. They could only manage that if the economy provided them not just with material wellbeing, but also industrial justice. The failure of the burgeoning industrial economy to do so – the refusal of capitalists to accept their social responsibilities – was seen as senselessly driving the working class to violence, and as an unnecessary embrace of centralized planning. Cooperation was possible between capital and labor when they each recognized that it is to their mutual benefit to acknowledge their social obligations. Brandeis believed that this sort of cooperation was essential to achieving a stable, growing political economy.

Summarizing these numerous complex and nuanced policies is a challenge. Bigness (size and concentration) was a curse because it opened the door to abuse of market and political power. Yet scale and scientific management were necessary to increase output and efficiency. Thus, competitive processes needed to support a range of efficient scale, which could only be achieved when social institutions actively engaged in policy to create the conditions for successful markets.

Unions were essential to balance capital, but their primary purpose was not simply redistribution or fairness. The creation of surplus demanded a proper recognition of labor and public resources in the production of value. Labor and the public needed a standard of living (income, hours of work, reliable employment, and leisure) such that it could be sufficiently educated and informed to participate fully in the market and in political processes.

Banks (financial institutions) and insurance played a crucial role in making available the financial resources that would achieve the minimum efficient scale. But big banks had become afflicted by the problems of big corporations. They were too big to be efficient and they had extended their activity far beyond mere finance into the management of industrial enterprises. The conflict of interest that resulted from being both financier and industrial entrepreneur improperly cut competitors off from access to capital. Recognizing the importance of properly functioning finance is a distinguishing feature of pragmatic, progressive capitalism. Stiglitz, too, devotes considerable attention to the role of malfunctioning finance in the severe negative effects of free market fundamentalism.

PROCESS: THE HALLMARK OF PRAGMATISM

There is another aspect of the Brandeis contribution to pragmatic, progressive capitalism that goes beyond the substantive policies he advocated. The process of adapting law to reality, epitomized in the Brandeis Brief, was crucial to ensuring that the emerging and adaptive political economy, driven by technology, could find stable footing in institutions and policies. Sallet's analysis of Brandeis reminds us that the process Brandeis envisioned was as important as the substance. Table 3.2 extracts the lessons from Sallet's reading of the work of Brandeis.

TABLE 3-2: FIFTEEN LESSONS FROM THE WORK OF JUSTICE LOUIS BRANDEIS

Competition policy is informed by broad considerations:
1. economic,
2. social issues, including democratic values,
3. a spirit of experimentation

Sectoral regulation should be used where justified by specific industry circumstances:
4. existence of local utility monopolies or
5. where normal competitive forces cannot get the job done

Vindicating the lofty goals by relying on learnings from:
6. economics and
7. other social sciences

Legal framework includes:
5. antitrust,
9. competition,
10. regulation

Institution building requires:
11. authority,
12. power,
13. tools

With implementation by:
14. public interest legal professionals in familiar obligations of antitrust and regulatory enforcers,
15. applied to the facts in a determined and detailed manner

Source: Adapted from Jonathan Sallet, "Louis Brandeis: A Man for This Season," *Colorado Technology Law Review*, 16:2 (2018)

Sallet's lessons establish a comprehensive framework. We must recognize (as Brandeis did) the limits of competition, markets, and antitrust in the economy. There are social and political outcomes we desire that are not well supported by markets. Competition policy should be informed by broad considerations, including economic and social issues, democratic values, and a spirit of experimentation. Sectoral regulation should be used where justified by specific industry circumstances. Such circumstances might include the existence of local utility monopolies or cases in which normal competitive forces are insufficient to meet social and political goals. Policy action should support lofty goals by relying on learnings from economics and the social sciences. Policy should translate the goals into administrable legal standards within the scope of professional obligations familiar to antitrust (and regulatory) enforcers. Laws and rules should be applied to the facts in a determined and detailed manner. Sallet's writing came in response to a drumbeat for simple antitrust that argues (incorrectly) that concentration with vigorous antitrust enforcement is enough to correct the problems in the digital sector.

It should come as no surprise that Brandeis's 50 years of involvement in public policy – from very specific regulatory and legal cases at the local level, to hugely important Supreme Court rulings – embodies the framework of pragmatic, progressive capitalism in America. The important surprises lie in the nuanced thinking that led him to dismiss what might be called idealistic progressive policy, not only (though perhaps most notably) in his steadfast rejection of socialism, but also in many other small but important details. Brandeis embodied and lived Stiglitz's complaint that progressive capitalism must not be mislabeled as socialism.

Brandeis's pragmatic view of the prospects for capitalism proved to be very modern, not only in laying the groundwork for the Golden Age of Capitalism that would follow World War

II, but also for astutely recognizing what was necessary for capitalism to survive. Many have recognized the need for a shift toward progressive policies in the long-term development of political economies. Some call this shift a turning point, others a critical juncture, but the essential characteristic they share is a movement toward inclusive policies.[26] The shift is not an adjunct of capitalism, but a fundamental component of its essence.

Elizabeth Anderson argues that the turn toward progressive policy early in the 2nd Industrial Revolution "should be seen as developments internal to the dynamics of democratic capitalism itself,"[27] which she claims are integral parts "of advanced capitalist democracies...that amount to departures from *laissez faire*." She identifies a long list of interventions that are necessary, requiring and justifying state actions that include:

1. State provision of public goods, such as roads, public health programs, and schools,
2. Centralized banking,
3. Regulation of the environment, securities markets, food and drugs, auto safety, etc.,
4. Social insurance and, to a much smaller extent, "welfare,"
5. Laws enabling labor unions, although she lamented the fact that unions were weak in the U.S. compared to Europe.[28]

Framing the Brandeis Protocol this way not only sets the stage for progressive policies, it also underscores the importance of a progressive response to the recent period of free market fundamentalism that takes a comprehensive view of what is necessary. In Figure 1.1, I label the too-narrow view of Brandeis as the "neo-Brandeis" view. The term "neo-Brandeisian" has been used[29] to describe the central role of Brandeis and his disciples in the New Deal. *The Curse of Bigness* animated Brandeis's resistance to the extreme centralization of the First New Deal. The Second New Deal, built by his disciples and blessed by the court on which he sat, enjoyed much greater approval from Brandeis. While the Second New Deal certainly entailed vigorous antitrust enforcement, it also devoted a great deal of attention to other economic policies.

The Brandeis Protocol includes a long list of progressive policies associated with Brandeis. In addition to antimonopoly activism (enforcement of the antitrust laws and the breakup of public utility holding companies), Urofsky includes:[30] taxation (income, inheritance, and excise), federal involvement in infrastructure (public works and public utilities), support for unions (hours and wages), financial sector oversight (structural [e.g., Glass Steagall and postal savings banks] and regulatory [e.g., the SEC]), protective regulation (e.g., safety nets, including unemployment insurance and social security), a professional public service (e.g., the post office), and cooperative federalism in which the states could experiment and from which federal policymakers should learn. Labels aside, the challenge of developing progressive capitalist policies to deal with a massive technological revolution—and the associated transformation of economic, social, and political life—requires the broad view of institutional change that Brandeis took.

LAWYERS, A PROFESSION GONE ASTRAY

Brandeis's critique of the legal profession sweeps in his understanding of industrialization, his notion of how the political economy could be set on a stable growth path, and his great disappointment at how industrialization had developed over the course of thirty years. His demand for a successful capitalist political economy based on public service and the public interest was never more apparent than in his framing of the role for lawyers.

Brandeis argued that "the peculiar characteristics of a profession as distinguished from other occupations"[31] was important and becoming more so as industrialization progressed. Knowledge and learning pursued largely for others, "in which the amount of financial return is not the measure of success," grew in importance. The industrial revolution had magnified the significance of certain characteristics, including the expansion of the necessary "field of knowledge." That is to say, the size of the enterprise demanded broader and more varied knowledge, expressed in the new science of management. Economic relations were changing as industrialization progressed.

> Ownership of the instruments of production passed from the workman to the employer. Individual personal relations between the proprietor and his help ceased. The individual contract of service lost its character, because of the inequality in position between employer and employee. The group relation of employee to employer with collective bargaining became common, for it was essential to the workers' protection.[32]

The very standard of success had to change to fit new economic relations. "The old idea of a good bargain was a transaction in which one man got the better of another. The new idea of a good contract is a transaction which is good for both parties to it…. Under these new conditions, success in business must mean something very different from mere money-making."

Political relations were changing as well. "[T]he American ideal of government has been greatly modified. At first our ideal was expressed as 'a government of laws and not of men.' Then it became 'a government of the people, by the people, for the people.' Now it is 'democracy and social justice.'"[33]

Lawyers were ideally suited to lead this progressive transformation. Lawyers in America had held a prominent position because of their training and style of thought: their frequent interactions with daily life, their need to absorb information quickly, and their need to reach a conclusion in a timely manner. There were also historical factors that enhanced the importance of the legal profession and gave lawyers a leading role in politics and policy. Such historical factors included the absence of nobility, who would have claimed a special role, and a written constitution, which made interpretation extremely important.

However, the legal profession was declining because "the lawyer has become largely a part of the business world." Their increasingly specialized practice had cut them off from the generalized interaction with the law and the people. Lawyers cared more about making money than service to the public interest. Their failure reflected their changed location in economic and social life. "The effect of this contraction of the lawyers' intimate relation to contemporary life was doubly serious, because it came at a time when the rapidity of our economic and social transformation made accurate and broad knowledge of present-day problems essential to the administration of justice."[34]

Lawyers bear special responsibility for guiding the outcome away from exploitation of the people, as Brandeis put it:

> Instead of holding a position of independence, between the wealthy and the people, prepared to curb the excesses of either, able lawyers have, to a large extent, allowed themselves to become adjuncts of great corporations and have neglected the obligation to use their powers for the protection of the people. We hear much of the "corporation lawyer," and far too little of the "people's lawyer." The great opportunity of the American Bar is and will be to stand again as it did in the past, ready to protect also the interests of the people.[35]

This failure was a grave threat to the American political economy.

> The people's thought will take shape in action; and it lies with us, with you to whom in part the future belongs, to say on what lines the action is to be expressed; whether it is to be expressed wisely and temperately, or wildly and intemperately; whether it is to be expressed on lines of evolution or on lines of revolution. Nothing can better fit you for taking part in the solution of these problems, than the study and preeminently the practice of law.[36]

He ends with a particularly and typically ominous warning.

> The strain upon the law has been great during the last generation, because there also the period has been one of rapid transformation; and the law has everywhere a tendency to lag behind the facts of life. But in America the strain became dangerous, because constitutional limitations were invoked to stop the natural vent of legislation. In the course of relatively few years hundreds of statutes which embodied attempts (often very crude) to adjust legal rights to the demands of social justice were nullified by the courts, on the grounds that the statutes violated the constitutional guaranties of liberty or property.[37]

Many of the same arguments were made against the behavior of capitalists, with whom Brandeis had done combat in state and federal proceedings. While Brandeis urged businessmen to adopt the obligations as a profession, he was particularly disappointed by the failure of lawyers to do so since they occupied a position in the political economy that should have made it natural. His attack on businessmen was also animated by the fact that there were clear examples of leaders of business entities who had recognized and embraced their obligations to a greater degree (some of whom were his clients).

4. THE PRAGMATIC, PROGRESSIVE MIDDLE: THE SECOND NEW DEAL

The political economy to which Stiglitz points in his critique of Piketty was the Golden Age of capitalism: the quarter century after World War II. The structure of that political economy was established in the second half of the 1930s, during a time that is referred to as the Second New Deal. Brandeis played a key role in the design of the second New Deal by defining what the political economy should not do. The outcome was very much a pragmatic compromise, rejecting extreme reliance on either central planning or free market fundamentalism, while imposing significant guardrails and guidance on capitalism and markets.

Separating out the progressive policies of the Second New Deal and locating them between the early Brandeis and post-WWII economy highlights a second important point that links the two men. Brandeis rejected regulated monopoly, not only in the 1912 election, but also in the early New Deal, where some argued for a direct, state-based approach to the economy along the lines of World War I management of the economy. A little over a decade later, after World War II, the U.S. moved quickly to demobilize and return to the pragmatic, progressive approach. War might be an excuse for state-based economic direction, but it was just that: a short-term necessity, not a long-term solution, as Stiglitz explained extensively in his critique of socialism.

REGULATED COMPETITION

Berk's account of Brandeis's central role in creating a political economy based on regulated competition is consistent with the accounts given by the other authors cited in the appendix to this chapter. Rather than focusing solely on the long-term success or failure of capitalist economies, however, Berk adds a layer of theory to explain how the process of creating a political economy worked.

Berk portrays Brandeis as a creative actor striving to establish a set of enduring relationships that would reflect specific economic, social, and political values at a moment of uncertainty created by the emergence of new technologies. These technologies could produce vast increases in the material wellbeing of societies, but the outcome – how much social surplus would increase and who would benefit – would be determined by the policies adopted and the relationships established. In order to achieve an outcome that was both economically feasible and politically desirable, Brandeis developed an alternate narrative for how the economy should be regulated. In the quote below, note that the word "republican" has a small "r," which refers to the form of government (a political concept).

> Brandeis decomposed the republican antimonopolist ideology…and recombined its parts with principles drawn from the progressive movement's devotion of applied science and public administration…The result was republican experimentalism…Likewise, he recomposed the populist proposal to enforce competition with the progressive proposal to regulate monopoly to conceptualize regulated competition.[38]

Indeterminacy of the outcome results from the fact that institutions are "bundles of rules, cognitive principles, or instruments that can be decomposed and recombined in unpredictable ways." The indeterminacy of outcomes also invites creative actors to develop competing narratives that conceptualize alternative institutional paths.

Brandeis rejected the claims made by the two dominant economic theories of the time. The conservative argument rested on social Darwinism – in a ruthless marketplace dominated by corporate giants whose interests were unchecked by public policy, only the survival of the fittest could produce economic progress. The socialist argument rested on the claim that only state control over the economy, large units, and monopolies could curb the abuses of centralized production. Brandeis argued that centralized control of the economy, whether in unfettered corporations or in the state, would yield neither economic efficiency nor political democracy.

Berk uses the example of the Federal Trade Commission to demonstrate both the broad theory of institutions and Brandeis's pattern of action in advancing the concept of regulated competition. Brandeis was quite active in these antitrust reforms and others. The FTC example could also be used to shed light on many of Brandeis's actions, including the protocol for the resolution of labor disputes alluded to in the title of Table 3.1.

A Progressive Constitution

Purcell provides an interesting link from Brandeis and the New Deal to Stiglitz. Focusing on a specific decision written by Brandeis when the Second New Deal was well under way, he argues that "*Erie* was a response to half a century of American history," presenting Brandeis with "the challenge of reversing a long standing ruling that had played an important role in putting a conservative stamp on decades of court rulings." He concluded that "the impetus to the passing of the decision was very much driven by the dramatic change in the political economy of the post-depression period."

> Brandeis's opinion...combined three more complex and value laden qualities…faith in reason and democracy (an unyielding faith in human reason and popular government), determination to alleviate contingent social injustice (arbitrary and contingent social factors limit human potential), and a balance, inclusive, tolerant, and pragmatic vision (inclusive social and constitutional vision)…gave Brandeis's overarching constitutional jurisprudence its integrity, its power, and its virtue.

Given his strong sense of the historical and sociological grounding of law, Brandeis would have recognized that dramatic change would cast his opinion in a different light and open the door to alternative readings as a result of the remarkable success of his vision, analysis, and advocacy. Viewing the transformations Purcell cites as the cause of the change, not unlike those identified by Urofsky, one must be impressed by how thoroughly Brandeis succeeded in laying the foundation for the Golden Age of Capitalism in the Second New Deal.

Comparing this list of changes to policies Brandeis advocated (as summarized in Table 3.1) to the list of 100 elements in Table 4.1, one can argue that society had moved sharply in the direction of almost every one of the goals he articulated. Furthermore, after writing dozens of dissents to decisions made by the conservative majority court, Brandeis wrote dozens of rulings to implement the principles articulated in his pre-Supreme Court dissents and policy advocacy.

The Second New Deal "established a centralized administrative state far more comprehensive than anything that the old Progressives had ever attempted," but much less comprehensive than the central planners wanted or the socialists would have preferred.

TABLE 4.1: THE SECOND NEW DEAL: PRINCIPLES OF PROGRESSIVE CAPITALISM

Second New Deal –
1) Institutionalized labor movement unlike anything that had previously existed, resulted from
   a) Depression-born sympathy for labor
   b) new union militancy
   c) an era of booming prosperity
   d) problems of economic inequality faded
2) Corporations were the instruments of mass productivity, objects of national pride, and rich sources of new jobs – the paramount social commodity of the age.
3) Government's responsibility to work toward "maximum employment"
4) The goal was to be achieved primarily through the efforts of "free competitive enterprise"
5) The political terrain was equally transformed
   a) Robber barons and the social gospel disappeared
   b) Progressive issues disappeared because significant progress had been made (e.g., child labor laws, unionism, anti-monopoly, workmen's compensation, the yellow dog contract, municipal ownership, employer's liability laws, public utility regulation)
6) The Roosevelt Court's primary goals were to (pp.201-202)
   a) reorient the Constitution,
   b) validate the New Deal, and
   c08) constrain the power of the federal courts
7) Supreme Court shaped the Constitution to expand federal power
   a) abandoning earlier limits on the Commerce Clause, the courts construing the spending power to allow a potentially vast range of new federal social and regulatory programs
8) validate the institutional changes.
9) State and federal legislation established a partial welfare state
10) Replaced ever-larger parts of the common law with statutory schemes
11) The image of the federal courts [had shifted] in a more [progressive] liberal direction
   a) The national judiciary became highly deferential to legislative action, especially in matters of economic regulation.
   b) No longer were they closely identified with private property and corporate wealth
   c) Increased sensitivity to civil rights and civil liberties
   d) Developed an image of protectors of individual noneconomic rights
   e) Declared legalized racial segregation in the public school unconstitutional
12) Court Rulings
   a) buried the doctrine of liberty of contract
   b) interpreted federal law more favorably toward organized labor
   c) expanded the reach of deferral power
   d) while allowing wide latitude for state economic regulation
   e) moved haltingly to strengthen the individual protections offered by the Bill of Rights
   f) showed new sensitivity to the First Amendment
   g) deferred broadly to legislative efforts
   h) construed statutes sympathetically to achieve their underlying purposes
13) proclaimed the wisdom and necessity of judicial restraint
   a) developing doctrines to restrict the opportunities for lower courts to "intrude" into areas of state and congressional authority
14) prevented parties from using diversity jurisdiction to avoid state laws and policies
15) sensitive to the need to control corporate litigation tactics, readily adopted a policy against forum shopping.

Source: Purcell: Edward A. Purcell, Jr., *The Progressive Constitution: Erie, the Judicial Power and the Politics of the Federal Courts in the Twentieth-Century (*Yale, 2000), the observations are offered throughout the analysis with short lists at pp. 11-12, 201-202, 229-230.

Of equal importance is the fact that many of the points Purcell says fell short of the full progressive agenda were actually part of Brandeis's pragmatic, progressive capitalism. The role of corporations and markets in creating economic success should come as no surprise. While the expansion of the federal government's role would certainly have been a concern for Brandeis, he supported federal and state regulation, commitment to progressive goals, and the important increase in reliance on federal and state legislation. The antitrust practice implicit in the shift in attitudes toward corporations is a mixed outcome, as discussed in the next section.

The exchange between FDR and Brandeis on the day the three pillars of the First New Deal were struck down by a unanimous court (Black Monday) captures the essence of Brandeis's vision. Brandeis had no interest in building a statist economy. He preferred the regulatory route and, in particular, the financial regulations that survived Black Monday. While he never could get to the small-unit economy of the early 19th century, there was an alternative route to a pragmatic, progressive, democratic, market capitalist system in the Second New Deal.

This unique view of political economy – an embrace of free markets based upon a dramatic turn toward progressive policies (or what I call "pragmatic, progressive capitalism") – led Brandeis into a series of conflicts, some predictable and others very unexpected. The charge of a "curse of bigness," which he levelled against giant corporations in industry and finance who had come to dominate key aspects of the economy during the early phase of the 2nd Industrial Revolution, also applied to big government. This led Brandeis to steadfastly oppose the First New Deal, voting (on Black Monday),[39] with the conservatives against a big government that sought to replace the market with central planning rather than restore free markets with strong oversight.

These Black Monday votes deserve some discussion because they were intended to "jolt the president and his advisors awake."[40] They make a very clear statement on how Brandeis saw progressive capitalism late in his life, just as he was about to become a driving force for policy. He voted against three actions (executive branch and pieces of legislation) that strongly signaled his "opposition to government centralization and the curse of bigness, and had called for vigorous enforcement of the antitrust laws."[41]

In what is probably the least well-known vote of the three (*Humphrey's Executor v. United States*), but one with particular relevance to current debates, he sided with the majority in defense of the principle that "separation of powers had been adopted by the Framers not to promote efficiency but to preclude the exercise of arbitrary power… Congress, in setting up independent commissions, had intended them to be just that – independent – and therefore protected from political firings."[42] Mason's interpretation of this vote give it great contemporary relevance with the foresight to understand that changes in the fundamental relationship between the branches would work both ways. As Mason put it, "he expressed great satisfaction saying: If men on the Federal Trade Commission and similar government agencies are not allowed to exercise their independent judgment, we should have in effect a dictatorship or a totalitarian state. What would happen to us, if Huey Long were President and such a doctrine prevailed?"[43]

In the second (also less well known) instance, Brandeis sided with the majority in a decision that put constraints on what Congress could do to affect private property (*Frazier-Lemke Act*). While Congress could certainly change property law, it had to do so carefully. "The government certainly had the power to change the terms of bankruptcy law, it could not out and out transfer property to a debtor that now belonged to the creditor. If Congress changed the law, it could apply only to the future mortgage arrangements."[44]

The third concurrence involved the National Industrial Recovery Act, which other progressives described as "delegation run riot,"[45] in a program that Brandeis believed was "wrongheaded and impossible to administer." This is the vote that caused FDR to claim that the Court had condemned him to a "horse and buggy" economy.[46] In the ensuing half decade, FDR and Brandeis found an alternative route to regulated competition that pleased them both.

A fourth decision on Black Monday struck down the Agricultural Adjustment Act. Brandeis dissented, but it was not a program he much liked. "Although concerned about the plight of the rural poor, Brandeis worried about the growing size of government."[47] Since the Court had the votes to overturn the program, Brandeis did not need to side with the majority and the program came back quickly. Thus, the votes to create a unanimous court were a strong signal to the White House.

Urofsky quickly notes that, following these four rebuffs, an immense shift in policy took place, setting the turn in the structure of the Second New Deal.[48] In addition to the Tennessee Valley Authority, which survived unscathed, he points to banking and finance (including the separation of commercial, savings, and investment banking), labor and unemployment insurance, social security, several taxes (income, inheritance, excise), the breakup of the public holding companies, emergency relief giving rise to the Works Progress Administration, and the continual fight to preserve states' ability to serve "as a laboratory of democracy."

The strongest market intrusions were reserved for extreme, highly visible cases of abuse and circumstances in which regulation failed to police and correct market power. These included outright bans on market behaviors (e.g., Glass-Steagall in banking), the breakup of interstate electricity holding companies (e.g., the Public Utility Holding Company Act, which still allowed interstate operations if it could be shown that interconnection of interstate utilities created efficiencies), creation of non-market entities to deliver services (e.g., rural cooperatives), and public infrastructure (e.g., dams).

Mason, writing before the 50-years of economic theory that led Stiglitz to support Brandies' Black Monday votes, describes the basis of Brandeis's actions in terms that perfectly align with Stiglitz's critique of market socialism and central planning.

> Brandeis, the inveterate foe of bigness, who had never pinned his faith entirely on government control, who had expressed doubt as to what the mind of the bureaucrat, no less than that of the banker or businessman, can comprehend – joined in declaring the act (the NIRA) unconstitutional.[49]

ANTITRUST AS AN INSTRUMENT OF PROGRESSIVE CAPITALISM POLICY

Hawley charts a clear, continuing, and strong debate within the New Deal over the role of antitrust and the failure of each side to put its stamp on policy. This debate, he notes, "was somewhat reminiscent of the one between Roosevelt and Wilson in 1912."[50] On one side was the failed effort to accomplish a dynamic economy by creating an economy of small "horse and buggy" economic units. On the other side was a similarly failed effort to accomplish the same goal through extensive planning that, by carving out broad swaths of the economy that were excused from antitrust enforcement, relied much less on the market and antitrust.

The antitrust policy of the New Deal that ended up somewhere between the two extremes of excessive centralization and "horse-and-buggy" decentralization arrived in the person of Thurmond Arnold, "an intense believer in a competitive economy and in the idea that such an economy had never had a real chance."[51] To create that economy required the "removal of 'economic bottlenecks'" and the subjugation of business decisions to the full play of market forces.[52] Arnold argued that the Sherman Act was available and, if vigorously enforced, likened it to a "traffic policeman…to police the highways of commerce….who must engage in arrests and prosecutions for their deterrent effect to facilitate traffic, not to halt it or operate it."[53]

To deter abuse and facilitate traffic, Arnold argued the government should file criminal and civil suits, but be willing to enter into consent decrees that would go "farther in the public interest than any criminal penalty could go."[54] Arnold added that the consent decree had to "give substantial advantage to the public…must not be regarded as pardons, and to ensure compliance…be subject to re-examination and must give the government access to corporate books."[55]

In the early days of the Progressive Era, shocking examples of abuse led to the passage of what Brandeis believed was groundbreaking antitrust legislation.[56] The late New Deal offered Arnold a vision of an equally shocking alternative.

> Private industrialists were capable of little beyond the pursuit of short-term profits. If left to themselves, they would organize against free competition. This would result in increasing statism. Eventually, there would be a resort to fascism…where the economy had become so rigid that it could not function without a head, a *furhrer* to order the workers to work and the mills to produce.[57]

At the same time, Arnold had a pragmatic view of size, not unlike that of Brandeis and Stiglitz.

> The whole controversy over size, he kept insisting was "meaningless." To argue that small units were better than large units…all depended upon the particular situation, upon the purposes to which the units were put. And the Antitrust Division would stand ready to deal with each situation one a case-by-case, industry-by-industry basis, one that would apply a practical test of efficiency and consumer welfare to each set of circumstances.[58]

Vigorous supporters of Arnold's approach to antitrust also recognized the need for other policies, "such things as graduated taxes, limits on size, and drastic simplification of complicated corporate structures."[59] The ultimate goal was not "'atomization' in the literal sense [which] was impossible and undesirable." Rather, Hawley cites Benjamin Cohen, who argued that "there was 'quite a difference between imperfect competition among a dozen or more units and a monopoly exercised by one or two.'"[60]

By the end of his tenure, Arnold claimed to have brought almost as many cases in the short five years of his administration of the Sherman Act as had been brought in the previous fifty.[61] Significant amendments to the antitrust laws were enacted late in the New Deal and shortly thereafter. Hawkins notes that the FTC had argued throughout the New Deal that two loopholes in the Clayton Act should be closed to "provide direct protection to the public." The Wheeler-Lea Act of 1938 made it unnecessary to show that a fraudulent practice harms a competitor. The Cellar-Kefauver Act of 1950 allowed the agency to take action against mergers that substantially lessened competition. However, Hawkins argues that earlier efforts to amend the antitrust laws "were largely ineffective for the purposes intended…any effect at all…was certainly not in the direction of stimulating economic expansion."[62] One later piece of legislation enacted just before neoliberalism rose to dominance (the 1974 Tunney Act) required the courts to review consent decrees, although its effectiveness has long been subject to question.

Hawley subtitles his book *A Study in Economic Ambivalence*, but there are two senses – political and economic – in which he seems to argue that this is a strength, not a weakness. Politically, Roosevelt "never suffered…from his reluctance to choose between planning and antitrust action" because his "mixed emotions so closely reflected the popular mind."[63] Economically, "so long as the competitive ideal and democratic heritage continue to mean anything, the dilemma itself seems likely to persist. And the problem of monopoly, in its broadest aspects will remain."[64]

In fact, this analysis suggests that, in antitrust and other policy spaces, "ambivalence" when it represents pragmatism, balance, and the flexibility to allow markets to adapt, is a strength, not a weakness. Flexibility, when proffered within the parameters of effective guardrails and progressive guidance that reflects the technological reality of the political economy, preserves the dynamics of the market and technological progress.

The lesson for antitrust policy from 90 years of antitrust (before the neoliberal school dominated the policy space) is clear for both antitrust and regulation along the lines of the pragmatic adaptation that Sallet suggested. The Sherman, Clayton, and FTC Acts are the foundation for the American commitment to a competitive economy, as are the institutions that regulate specific sectors (Sallett 14, 15). Enforcement is more than half of the solution. Lax enforcement undermines competition and its expected positive results in both antitrust and regulation (Sallett 6, 7). Gaps in the law appear from time to time and they must be filled with legislation. (Sallett 11, 12, 13) There are three sources of these gaps: a) the language of the underlying statute may not be clear enough to address important emerging issues, b) long periods of lax enforcement may build up large structural problems in the economy, and c) inertia in the judicial system may make it ineffective to seek to change policy through the courts (i.e., it takes too long or can be impossible to address). Targeted legislation may be the only effective option. Technological change may create new economic structures and abusive practices that cannot be addressed well by existing law. There are important new economic relationships that antitrust and regulation cannot reach under existing law. New economic and non-economic abuses require expansion of antitrust, regulation, taxation, and other policy tools, and these generally suggest that a different body of law is needed. (Sallett 8, 9, 10)

PRACTICING POLITICAL ECONOMY: PRAGMATIC, PROGRESSIVE, DEMOCRATIC, MARKET CAPITALISM

Throughout this paper, I use the term "political economy" to describe the competing models advocated by various policymakers. I use the term **political economy** in three ways.

A political economy is a constellation of political and economic institutions forming a coherent system that produces the material conditions in which people live. I prefer "political economy" to "mode of production" (Marx) or "mode of subsistence" (Smith) because it reminds us there are two spheres of paramount importance—political and economic. A functioning and compatible polity and economy are necessary to create a successful system. The term "political economy" also reminds us that the political is not only of equal importance, but in some senses more important.

Political economy is also a scientific discipline with deep roots in social analysis. As Pearce puts it:

> Political Economy: Until recent times the common name for the study of the economic process. The term has connotations of the interrelationship between the practical aspects of political action and the pure theory of economics. It is sometimes argued that classical political economy was concerned more with this aspect of the economy and that modern economists have tended to be more restricted in the range of their studies.[65]

Flowing from the second connotation of the term, **political economy is also a pragmatic approach to action**. There is no separation between analytical and political practice. Thus, Piketty urges social scientists to engage in the "old-fashioned" practice of political economy. He argues that economics is set apart from the other social sciences "by its political, normative and pragmatic purpose...The question it asks is: What public policies and institutions bring us closer to the ideal society?"[66] We hope that our analysis is objective in the sense that it correctly depicts reality, but there is no escaping the fact that subjectivity is inherent in all thought. Nor should there be any effort made to hide the fact that we seek to influence the structure and function of the political economy through analysis and policy action.

The core change fueling the comeback of political economy in the contemporary debate is the rejection of the neoclassical assumption that the economy can be studied and modeled as a system devoid of political action and unaffected by policy choices. Once "free market fundamentalism"[67] is overthrown and the role of policy is recognized as central to economic progress, questions of governance take center stage. How are policy choices made? By whom, and to whose advantage? Political and social institutions are now seen as key determinants of the nature, structure, and performance of the economy.

Brandeis and Stiglitz are both political economists in the classic tradition, not only because they understand the unbreakable link between the political and economic, but also because they base their arguments on—and revere scientific analysis of—facts and data. Brandeis is famous for the creation of the "Brandeis Brief" in court cases. As noted by one historian, his first great legal victory was based on "two pages of legal analysis and 100 pages of data."[68] Stiglitz has argued much the same, not only pointing out that the political and economic are inseparable,[69] but also offering science and knowledge as one of the most important drivers of economic growth.[70]

Given this approach to political economy, along with the complex contemporary debate, the pernicious mischaracterization of the Brandeis-Stiglitz model, and the importance and limitation of competition in that model, the term that properly describes the Brandeis-Stiglitz model is pragmatic, progressive, democratic, market capitalism. We need all the adjectives to keep things carefully sorted out.

We need the term "capitalism" to rule out systems that rely on markets, but not capitalism (e.g., Stiglitz's description of market socialism and contemporary China).

The word "market" is necessary to rule out alternatives that rely little or not at all on markets (the source of Brandeis's resistance to the First New Deal).

The word "democratic" (lowercase "d") rules out the repressive alternative regimes that both Brandeis and Stiglitz saw denying labor rights, failing to develop citizen capabilities, and disenfranchising or discouraging participation in all aspects of political and industrial governance (on which Brandeis and Stiglitz agree entirely). Philosophically, the lowercase "d" goes hand-in-hand with competitive markets and prevents political economies that are regressive and repressive, such as the specter of fascism that haunted the debate not only in the 1930s, but also today.[71]

The word "progressive" highlights the sharp contrast with regressive social Darwinist models based on free market fundamentalism (*laissez-faire,* conservative, neoliberal principles) that both Brandeis and Stiglitz fought against.

"Pragmatic" is particularly important because the Brandeis-Stiglitz alternative was an adaptive, emergent approach.[72] They frequently recognized that it was a second-best option, but one that far outperformed all the alternatives. They inevitably started from strong principles with modest initial implementation.

Having highlighted the importance of the five underlined characteristics of the model, a shorthand name – "pragmatic, progressive capitalism" – suffices to describe what I show to be the remarkably successful American model whose past and future success is intellectually grounded in the work of Brandeis and Stiglitz.

PART III
THE STIGLITZ MODEL OF PRAGMATIC, PROGRESSIVE CAPITALISM IN RELATION TO CONTEMPORARY ECONOMIC THOUGHT

5. The Stiglitz Model Of Progressive Capitalism

While I define the policies through the eyes of Brandeis in Table 3.1, the list of progressive policies also goes a long way to describe the policy position of Joseph Stiglitz. As shown in citation to Table 5.1, in just the preface and introduction (less than 50 pages) to his most recent book (the first of his books to use "progressive capitalism" in the title), I find over three-quarters of the 100 issues and almost nine-tenths of the major categories. Virtually the entire list is covered when the historical analytical part of the book is considered. Stiglitz points to his earlier work to buttress specific aspects of his argument, so there is no need for secondary sources, as was the case with Brandeis. However, I do review *The Role of the State* to fill in the picture in Table 5.1. This illuminates a great deal and is important, particularly since Brandeis grappled with the question of the state's role in his reaction to the New Deal.[73]

Figure 5.1 presents a summary of the Stiglitz model of progressive capitalism derived from his most recent book. Policy choices in the left column drive the political economy toward its performance goals in the far-right column. To succeed, the political economy must overcome the key challenges of its environment. Performance in the long term reflects how well policy triggers ten key economic factors, which constitute four economic variables: investment, profit, productivity, and wages. The performance of the economy is driven by three processes: opportunity/participation, workably competitive functioning, and innovation. The variables tested below in the econometric analysis are in bold and underlined. While there are gaps in the econometric data set, I fill those gaps with a re-examination of data from a study by the Cato Institute,[74] which overwhelmingly supports my interpretation of the superior performance of the progressive political economy. The factors examined in the response to the Cato analysis in Chapter 4 are starred.

Table 5.2 views the Brandeis Protocol through the Stiglitz Model. Viewing Brandeis's major economic analyses (at least in terms of the attention they received), Stiglitz hit the same issues regarding regulated competition as the response to the *Curse of Bigness* and regarding banks in *Other People's Money*. Stiglitz's proposed solution was not to get rid of these institutions but to bend them to do good rather than harm. Chapter 3 discusses many of the details of this model in the context of demonstrating its consistency with contemporary economic thinking. I have identified, and numbered two dozen elements of the Stiglitz model, which can be readily related to the 100 elements of the Brandeis Protocol. In Chapter 8, I use this numbering approach to help explain how the digital revolution relates to the Stiglitz model and, indirectly, to the Brandeis Protocol. Taken together, this analysis establishes what I call the "Brandeis-Stiglitz framework for progressive capitalism."

The Continuity of the Pragmatic, Progressive Capitalist Model

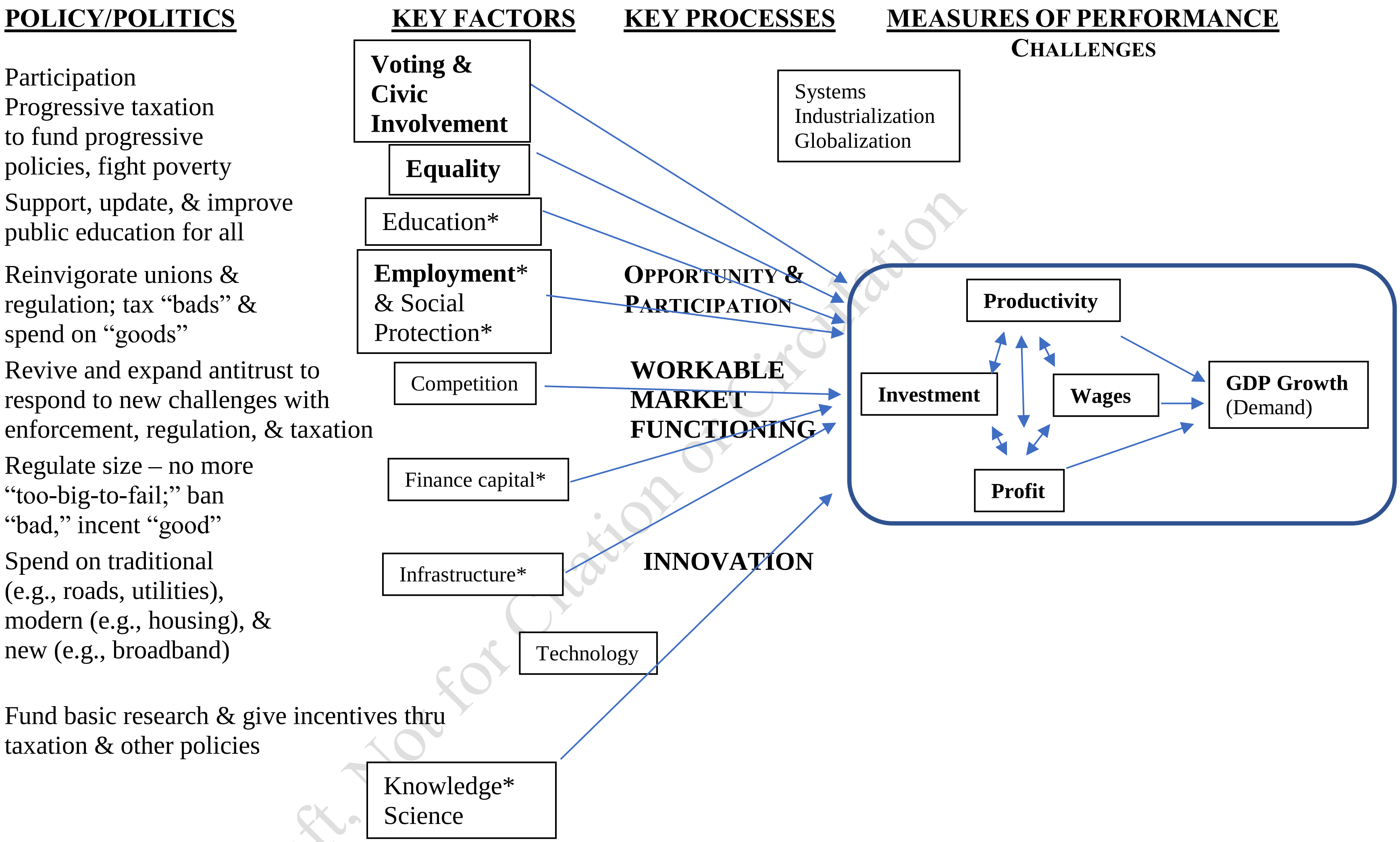
Before turning to the many economic literatures that support the Brandeis-Stiglitz model, I address some apparent differences between Stiglitz and Brandeis that prove to be fairly insignificant upon close examination.

TABLE 5.1: STIGLITZ VIEWED THROUGH THE BRANDEIS PROTOCOL FOR PROGRESSIVE CAPITALISM

	Economic Fundamentals	People	State		Political Fundamentals	People	State
1	Capital/Free markets	xiii, xiv, xxii	51, 53	49	Democracy & competition	25, 30	21, 31, 52
2	Fairness & equal opportunity	xii, xxiv, xxv, 28, 130-131 139, 141-142	41	50	Civil Rights (Gender)	xi, xix, 13	
3	Industrialization>Globalization	xvi, xxvi, 7, 21,		51	Education	xxv, 7, 24-25	13, 56
4	Inequality	xiii, xv, xvi, xxvi	28	52	Partcipation	27	24
5	Efficiency	xxi, 23	34-35	53	Responsibility of Citizans	xiv, 28, 140	62
6	minimum scale, diseconomies			54	Unaccountable power	xix, 8, 113	55, 63
7	Competition	xxiii, 24, 33, 65	47	55	Speech		
8	Yardstick competition		53	56	Privacy		
9	Innovation	xiv, xv, 7, 9, 25	53	57	Law		
10	ConcentratIon/Trustbusing	xiii, xvi, 5, 53	25, 35, 45, 47	58	the public interest, pub. Private Law	2-5, 28-30, 113	
11	Vertical Integration	5, 2-3, 113		59	Lagging Law (common)	xiv, 11	
12	Collusion	65	60	60	due process		
13	Unaccountable Power	5, 2-3, 113	26	61	Lawyers		
14	Big Banks, Intermediation	xiii, 8,103, 111, 113, 144	23	62	Obligtions of a Professions		
15	XS Financialization	109		63	Inherent Qualities		
16	Conflict of Interest	103-104		64	Fialure in Capture		
17	Denial of Access to Capital	105-106	15	65	Living Law		
18	Access to information	xiv, 5, 33, 49, 65		66	Social Science		
19	Anticompetitvie impacts:	xiv, 5, 33, 49, 65		67	Threat		
20	Excessive pay, fees charges	xiv, 5, 33, 49, 65		68	Lagging Law		55
21	Price, service	26		69	Pragmatic Process	xxiv	
22	Taxation	26	13, 42	70	Law & Reality	xiv,	13
23	**Political Economies**		\	71	Facts (Brandeis Brief)	xiv,	
24	Progressivism	30	42-43	72	Flexibility (evolutinary)	xx	33, 58
25	Socialism	28	57	73	Experimentation/Federalism	vi, 11	
26	Conservatism	14-20, 25-27, 68-71	56-57	74	Restraint & Responsibiity	xx, xix, 145	
27	New Deal	xiv	13	75	Judicial	27	
28	**Labor**	9, 13, 23, 54-55		76	Presidential	15	
29	Living Wage/Poverty	44, 45, 144-145		77	**Regulated Competition,** Institution building	xxiii, 24-25 30, 143	13, 33, 38, 57
30	Unrest	30		78	Antitrust	68-76	
31	Unions	xxii, 24		79	Sherman Act		
32	legality			80	new agencies (FTC)		
33	responsibiity (incorp)			81	Regulation	xxiii,145-147	
34	Conditions, (hour, wages, reliability)	ix, 13, 23		82	Authority, power & tools	xii, xxii	21-22
35	Self-gov't./			83	Uniqueness of war		13
36	Collective Bargaining			84	Police power	xxiii	22, 42-43
37	Arbitration			85	Power to tax new	xxiii	22, 42
38	hours, wages	13		86	Mail		13
39	reliability	13		87	Interstaate Commerce		
40	Cooperation			88	Economic	xiii, xiv, 13,31, 141	
41	shop			89	New/expanding (Fed. Reserve,ICC)		
42	profit sharing			90	Trade & Curreny	xiii, xvi	
43	reliability	13		91	Infrastrcture	25, 138-139	13
44	insurance	xxiii	64	92	Utilities		
45	Scientific Management		34-35	93	Workplace		
46	Cost Savings			94	Workers Comp.	xxiii	
47	Social challenges			95	Health, safety	24-25, 141	17
48	Surplus			96	Investor Protection	23,61	
				97	Public Provision	23,61	13
				98	Public Fnance		
				99	Public works	26	13
				100	Public Lands	xvi	

Sources: People = *People, Power, and Profits: Progressive Capitalism for an Age of Discontent* (Norton, 2019)
State =. *The Economic Role of the State*, Arnold Heertje, (Ed.) (Basil Blackwell,1989)

FIGURE 5.1: THE STIGLITZ MODEL OF PROGRESSIVE CAPITALISM
(bold entries operationalized in Chapter 5)



Sources: Joseph Stiglitz, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent* (Norton, 2019); *The Economic Role of the State*, Arnold Heertje, (Ed.) (Basil Blackwell,1989)

TABLE 5.2: THE BRANDEIS PROTOCOL VIEWED THROUGH THE STIGLITZ MODEL

Stiglitz Model	Brandeis Protocol	Stiglitz Model	Brandeis Protocol	Stiglitz Model	Brandeis Protocol
Key Processes					
1. Political	34-27,48-76	4. Outcomes	1,48	10. Challenges	76
2. Policy choice	77-94,13-20	5. Investment	45,96	11. Systems	21-27
3. Involvement	52,61-64	6. Profit	42,45	12. Industrialization	3
	57-76	7. Productivity	5	13. Globalization	
		5. Wages	29, 38		
		9. GDP	47-48		
Key Processes					
14. Opportunity & Participation	2, 22, 52-55	15.Workable market function	1, 7-8	16. Innovation	9
Key Factors					
17. Equality	4, 50				
15.. Education	51				
19. Employment	28-44,				
20. Social protection	92-96				
21.Infrastructure	94,97-100				
22.Competition	7-8,77-90, 95-96				
23.Finance capital	14-18				
24. Knowledge/ Science/ Technology	45-48				

Sources: Tables 3.1 and 4.1.

The discussion of the nuanced differences between Brandeis and Stiglitz is not intended to suggest the Brandeis is dated or irrelevant. On the contrary, the fact that his progressive principles encompassed the full cycle of two industrial revolutions is testimony to their enduring power. There are strong similarities between Brandeis and Stiglitz in terms of their analytic frameworks and in the process of economic transformation they envisioned as technological/industrial revolutions unfolded. Of necessity, there are differences reflecting the specificity of the dominant technologies, but the similarities far outweigh those differences. In fact, the policy responses dictated by the principles of progressive capitalism easily handle these differences. The success and adaptability of these policy responses provide strong evidence that progressive capitalism is the right solution to secure the stable growth of the ongoing technological revolution.

Showing the definitions offered by Brandeis and Stiglitz on separate pages should not be taken to suggest that there is a difference between them. Stiglitz's observations about the period in which Brandeis practiced political economy underscores the strong similarity between the two. Looking back, Stiglitz identified the same forces that Brandeis struggled with.

> The growth of large enterprises in the early part of the twentieth century led many economists to extrapolate the trend and to envisage a market economy in which each of the major sectors – steel, oil, automobiles, aluminum, and so on – was dominated by one, or at most a few, firms. Economic theory bolstered these predictions. The technologies involved large fixed costs. New organizational techniques, such as introduced by Alfred Sloan at General Motors, meant the

increasing costs associated with larger scale enterprises, arising from lack of organizational control, could be limited. The establishment of national markets, and national media to advertise in those national markets, provided further basis for returns to scale. With no major sources of decreasing returns to the firm, and some major sources of increasing returns, one would expect each industry to be dominated by one or at most a few firms.[75]

As shown above, Brandeis's early contribution was to argue that there were, in fact, decreasing returns to scale, as symbolized in "the curse of bigness," but that the cures were nuanced and applied to government as well as corporations. Brandeis embraced competition as superior in both the economy and the polity if it was well-regulated. This was a sentiment that Stiglitz shared entirely.

> Thus the choice facing economies was (1) to allow monopoly capitalism to take hold, with the distortion in resource allocation (and almost inevitably the concentration of political power that arise); (2) to have direct government control of these sectors; or (3) to attempt to regulate and control the exercise of monopoly power, either by breaking up the monopolies (with the possible loss of efficiency from failing to exploit economies of scale) or by controlling anticompetitive practices. Few democratic governments found the first acceptable. The United States was perhaps most aggressive in pursuing the third strategy.[76]

Stiglitz argued that the initial "big case" under the Sherman Act – breaking up Standard Oil – "had ambiguous effects."[77] Brandeis, who worked tirelessly to amend the antitrust laws (e.g., adding the Clayton Act), argued the same. Stiglitz notes that the debate continued though the 20th century, and his policy recommendations continue to advocate "stronger antitrust, but also stronger regulation, while rejecting both monopoly capitalism and socialist elimination of private capitalist property." The political economy he advocated – based on competition, markets, decentralization, and preserving incentives for innovation through progressive regulation – was entirely consistent with Brandeis's vision, keeping basic historical conditions in mind.

First, as mentioned above, the bridge from Brandeis to Stiglitz must recognize Brandeis's criticism of Teddy's "regulated monopoly" in the 1912 election and his rejection of the extreme centralization of the First New Deal. Brandeis and Stiglitz did not want the state to run the economy. Rather, they wanted the state to set the conditions in which a competitive, decentralized market economy would function well. The role of state could be quite large, including political and social policy, but still allow the economy to function as a capitalist market system.

Second, reflecting this concern, Brandeis had a very strong belief in the role of decentralization through the states in federalism as a strong mechanism to ensure a balance of power in the American system – a mechanism that has receded in prominence. Stiglitz emphasizes decentralization of economic decision making within the parameters set by progressive policy.

Third, both Brandeis and Stiglitz express strong support for checks and balances between branches of the government.

Fourth, on the other hand, the Great Depression – to which Brandeis applied the progressive principles he developed over decades of "opposition" to conservatism – left little doubt that free market fundamentalism had failed and change was in order. After the Great Recession, a quarter century of neoliberal dominance was called into question, but ultimately rebounded with many either rejecting or ignoring the lessons from the recession. Stiglitz, however, continues to argue for an end to neoliberalism.

Fifth, given their different locations in the lifecycle of progressive capitalism, Brandeis and Stiglitz have different focal points. Building a progressive political economy in the face of the massive economic shift brought on by the 2nd Industrial Revolution, Brandeis initially focused on the two most important forces shaping the political economy. His examination of capital was focused on concentration, trusts, and their abuse of market power. His examination of labor was focused on unions as the vehicle for labor to establish a space for effective political participation and to get a fair share of the surplus being created. Seeking to return to the remarkable success of progressive capitalism in the creation of a vast middle class (an outcome entirely consistent with Brandeis's desire to move capitalism in a progressive direction), Stiglitz focused on inequality and the harm that it did to the middle class and the progressive political economy.

Sixth, Stiglitz has advantages that must be acknowledged – three sources of support in the social scientific sense that Brandeis would have greatly appreciated and certainly exploited. (1) Stiglitz has a strong, successful model of progressive capitalism he can cite as proof of the superiority of the economic model he advocates. (2) Stiglitz can point to the failure of the hardcore socialist model (communism, although he also demonstrates the inferiority of market socialism). (3) Stiglitz has the benefit of at least half a century of economic theory he can refer to in support of his model. That includes not only his own Nobel Prize in economics as affirmation, but also two dozen others (as discussed in Chapter 3).

Seventh, the transformation of the economy required Brandeis and Stiglitz to deal with the fundamental political/policy implications of their respective periods. In both cases, the scale of activity was changing dramatically. For Brandeis, industrialization in the early phase of the 2nd Industrial Revolution meant a dramatic increase in **interstate commerce**, which was *the* great challenge for national policy under the U.S. Constitution. The Confederation of American States had failed because the colonies had not ceded enough power to create an effective nation-state. The Commerce Clause was the very cautious attempt of the colonies to deal with that problem. Debate over what it meant began as soon as the ink had dried.

For Stiglitz, the late phase of the 2nd Industrial Revolution and the early phase of the 3rd raised a similar problem of scale, albeit with a different manifestation – globalization. This is a challenge that appears in the title of two of his books. The need to deal with sovereign nations in the response to globalization recalls a key aspect of the Brandeis Progressive Protocol that has been underemphasized in recent years.

It is somewhat ironic that, while Brandeis steadfastly resisted excessive centralization and planning by the federal government, he heaped praise on the willingness and ability of the states to experiment with various schemes of protective regulation. Smaller state government was seen as more accessible and closer to the people. American federalism was a huge plus from the point of view of pragmatic, progressive capitalism because it fostered an approach that was between the "do-nothing" (at most, defend property) state of free market fundamentalism and the "do-everything" state of socialism. Contemporary progressive analysis uses the term "entrepreneurial state" to describe this type of state action wherein the level of government is secondary to the thrust and intent of the policy. With Trump's extreme market fundamentalist attack on individual states, interest in the benefits of American federalism may be revived precisely along the lines Brandeis envisioned.

The Pivotal Role of Progressive Policy in the History of Industrial Capitalism

The Structure, Conduct, Performance Framework

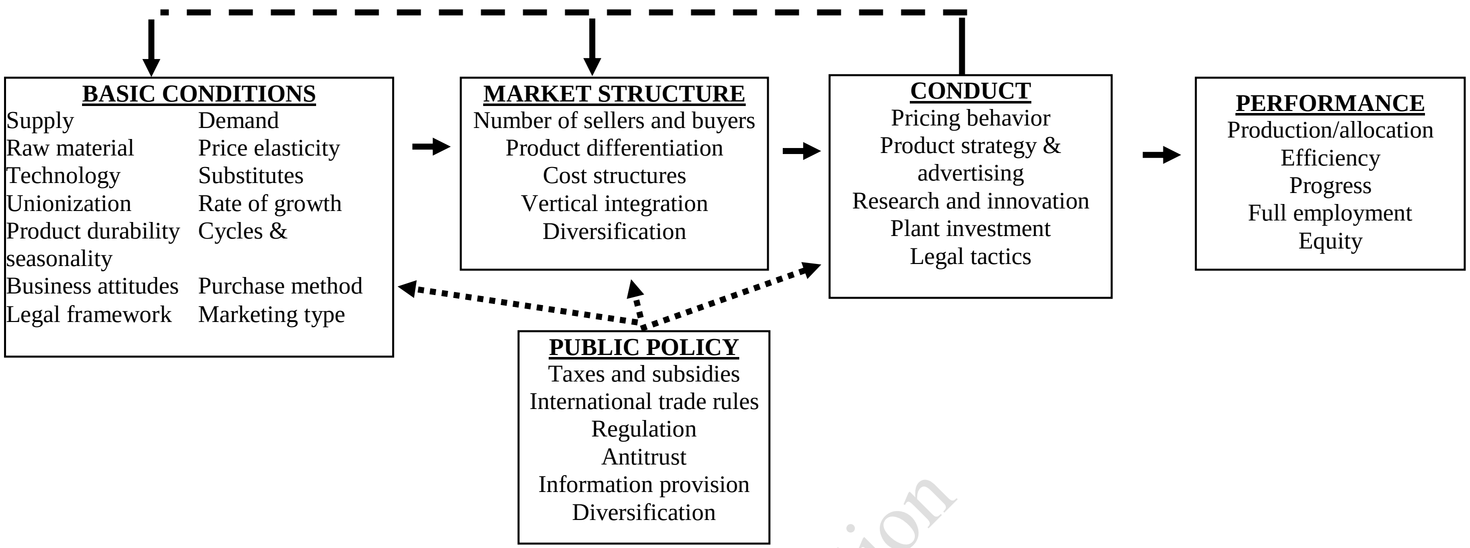
This formulation of the pragmatic, progressive capitalist political economy is not some alien or foreign import. It is entirely home grown. In fact, the Brandeis-Stiglitz framework for progressive capitalism is consistent with the model of industrial organization that dominated the thinking of progressive capitalism in the middle of the 20th century. This model came to be known as the Structure, Conduct, Performance paradigm (SCP).[78] It recognizes the importance of a balanced view of political economy in which markets are the core institutions, but are encased in policies that build guardrails for, and provide guidance to, the market. The model described in a prominent text on industrial organization is summarized in Figure 5.2. Additional examples of the SCP paradigm provide nuances, but agree on the basic factors and its implication for policy.[79]

Scherer and Ross argue that "what society wants from producers of goods and services is good market performance. Good performance is multidimensional."[80] They conclude that markets should

- be efficient in the use of resources, and
- be responsive to consumer demand, and
- be progressive in taking advantage of science and technology to increase output, and
- provide consumers with superior new products, and
- promote equity in the distribution of income so that producers do not secure rewards in excess of what is needed to call forth services supplied, and
- provide consumers with reasonable price stability, and
- facilitate stable, full employment of resources, especially human resources.

The 32 specific elements that constitute this paradigm have all been identified in the analysis in Chapter 2. There are two other key assumptions that Scherer and Ross make in offering this framework that tie them closely to the Brandeis-Stiglitz political economy.

FIGURE 5.2: THE STRUCTURE-CONDUCT-PERFORMANCE PARADIGM, PUBLIC POLICY AND WORKABLE COMPETITION



CRITERIA OF WORKABLE COMPETITION

Structure

The number of traders should be at least as large as scale economics permit.
There should be no artificial inhibitions on mobility and entry.
There should be moderate price-sensitive quality differential in products offered.

Conduct

Some uncertainty should exist in the minds of rivals as to whether price initiatives will be followed.
Firms should strive to attain their goals independently, without collusion.
There should be no unfair, exclusionary, predatory, or coercive tactics.
Inefficient suppliers and customers should not be shielded permanently.
Sales promotions should be informative, or at least not be misleading.
There should be no persistent, harmful price discrimination

Performance

Firms' production and distribution operations should be efficient and not wasteful of resources.
Output levels and product quality (i.e., variety, durability, safety, reliability, etc.) should be responsive to consumer demands.
Profits should be at levels just sufficient to reward investment, efficiency, and innovation.
Prices should encourage rational choice, guide markets toward equilibrium, and not intensify cyclical instability.
Opportunities for introducing technologically superior new products and processes should be exploited.
Promotional expenses should not be excessive.
Success should accrue to sellers who best serve consumer wants.

Source: F.M. Scherer & David Ross, *Industrial Market Structure and Economic Performance* (Houghton Mifflin, 3rd ed., 1990), pp. 5, 53-54.

First, they tie the operation of markets to democracy, making it the leading argument in favor of competitive markets. They choose to "begin with the political arguments…because when all is said and done, [political arguments], and not the economists' abstruse models, have tipped the balance of social consensus toward competition."

They offer several reasons for the close association between markets and democracy: "The atomistic structure of buyers and sellers required for competition decentralizes power…[l]imiting the power of both government bodies and private individuals to make decisions that shape people's lives and fortunes…[C]ompetitive market processes solve the economic problem *impersonally*, and not through the personal control of entrepreneurs and bureaucrats…[The] merit of a competitive market is its freedom of opportunity."[81]

Second, they are pragmatic. Beyond the specific elements, the authors take a practical view, emphasizing not perfect competition, but *workable* competition. As shown at the bottom of the figure, they have offered a list of measures for a "workably competitive" market. I have arranged the attributes roughly according to their relationship with the underlying paradigm. Scherer and Ross note: "Measuring the degree to which the goals have been satisfied is…not easy, but relevant indicators include price-cost margins, rates of change in output…and price levels."[82] These are the primary measures analyzed in this paper. In a workably competitive market, firms are constrained by competitive market forces to earn only a "normal" rate of profit. They do not have the power to set prices unilaterally through collusion or coordination of their conduct to gain excess profits. They are also driven to invest and innovate; to win and hold customers who can choose which products to consume. This forces firms to be responsive to consumer needs that evolve over time.[83] However, they have no illusions about "perfectly competitive" markets.

PERVASIVE MARKET IMPERFECTIONS: TWO DOZEN NOBEL LAUREATES

Brandeis's critiques of *laissez-faire* and Stiglitz's critiques of free market fundamentalism have a very strong basis in the broad economics literature. Stiglitz expresses a strong sentiment that the neoclassical *laissez-faire* model has been refuted at every level for the fundamental failure of its assumptions, explanations, and predictions. Therefore, the model can be rejected out of hand – a sentiment repeated almost verbatim by other analysts.[84] The pragmatic, progressive capitalist view finds significant support among a very august group of economists – Nobel laureates. This chapter provides the building blocks for major alternative schools of thought that have been recognized in a series of Nobel Prizes over the past quarter of a century. These critical schools of thought expand and strengthen the market failure analysis. Stiglitz has taken a leading role in combining them into a comprehensive analysis of challenges facing all political economies.

As shown in Table 5.3, Stiglitz is one of many Nobel laureates who made it clear that free market fundamentalism fails to depict the reality of market performance, and is therefore a deficient theory of real-world behavior. Table 4.1 shows the general correspondence of the critiques to the differences in fundamental economic models. In addition to the laureates at the top of the figure, I define the specific market failures that define the schools in the bottom row

TABLE 5.3: NOBEL LAUREATES ON MARKET IMPERFECTIONS, WITH STIGLITZ REFERENCES

Structural & Societal Flaws	Endemic Tendencies	New Institutional & Transaction Cost Economics	Behavioral Economics	End of Value-free Economics/Return of Political Economy
Structural Flaws Krugman, 2008*; Heckman, 2008; Deaton, 2015* **Technological Change (innovation)** Solow (1956)* Nordhaus, 2018, Romer, 2018	Stiglitz, 2001; Spence 2001; Tirole 2014; Hart & Holstrom, 2016	Coase, 1991; North, 1993 Fogel, 1993; Ostrom, 2009 ; Williamson, 2009	**Human Behavior** Simon (1957); Akerloff, 2001; Kahneman, 2002; Smith, 2002 Shiller, 2013;* **Strategic Conduct**: Nash 1991Selton, 1994; Harsanyi, 1994; Thaler, 2017*	Sen, 1998*; Bannerjee, Duffo & Kremer, 2019

MAJOR CATEGORIES OF MARKET IMPERFECTIONS (with citations to *Wither Socialism*)

SOCIETAL Expanded Role of Externalities, *7, 41, 55* Network Effects, *29* Innovation Economics *29, 65-66* **STRUCTURAL** *14, 34, 41, 66* Imperfect Competition *7, 12, 103-107* ICE Problems Technology Marketing, Bundling Cost-Price *66, 83-89* Ownership *20, 63, 105* Elasticity Availability *67*	**ENDEMIC** Information Asymmetry *8, 29-30, 35, 87-88* Incentive Problem *14, 49, 59, 65-66, 87* Perverse Incentives *11, 20, 30* Inequality of Capital *7* Financial *63, 90-102* Physical *68, 83* Human Capital Macroeconomic Imbalances (*Keynes 22*) Income Demand Insufficiency Investment *9, 16, 23* Instability	**NEW INSTITUTIONAL/ TRANSACTION COST** *33, 49, 91, 106* Search & Information Imperfections Bargaining costs Incomplete Markets *5, 6, 34, 38, 42-43* Risk *67* Future *65* Enforcement *67-68*	**BEHAVIOR** *66, 103-105* Motivation Values & Selfishness *68,70* Satisficing *67* Fairness/reciprocity Social Group & Status Perception Social Influence Calculation *67, 97-99* Bounded Rationality Heuristic Decision-making Execution *67* Bounded Willpower Improper use	**POLITICAL ECONOMY** *3, 66, 83, 88-92.* Foundational Values Wellbeing, capabilities Declining marginal value of wealth Distribution of surplus 7, *11* Power Legal Framework Inequality *46-49* Policy *7* Taxation Subsidies Trade Protectionism Antitrust Toward Regulation *7*

I put stars next to the laureates that Stiglitz references in his most recent book. Significantly, they are behavioral economists, which attests to the importance of the development of that school of thought. Only two of the laureates on the list predate the overall group, Solow and Simon, who are uniquely important. Stiglitz mentions Solow (his dissertation advisor) who was central to the reconsideration of innovation. Simon was an early practitioner behavioral economics, which became a central force transforming economics (undermining neoclassic economic assumptions) and many of the behavioral economists mention Simon.

The critiques are overwhelmingly American. Five-sixths of these Noble Prizes were awarded to economists identified with the United States (although a few also listed other nations). Of all prizes in economics awarded to those who list the U.S. as an identifier, just under half were for this critical work. The home-grown critique of conservative economics calls into doubt not only free market fundamentalism's assertions about market functioning, but also its assumptions about underlying economic motivations. Moreover, it does not result in a rejection of markets. The broad critiques strengthen the case for considering the conditions under which markets perform poorly. It follows then that policy interventions are appropriate to correct market imperfections and market failures. In fact, few if any of these Nobel laureates abandon capitalist markets as central economic institutions. Their primary goal is to identify the sources of market failure with greater precision and prescribe policies to reduce market imperfections, all while preserving the positive, dynamic forces of markets. In terms of Table 4.1, the debate between market fundamentalists and progressive capitalists overwhelmingly favors the latter.

MARKET IMPERFECTIONS AND THE CHALLENGE FOR POLITICAL ECONOMY IN THE STIGLITZ FRAMEWORK

Stiglitz is in much more than just good company among these laureates. His political economic approach, along with the belief that the economist must advocate specific policies by showing the inadequacies of alternatives, leads him to a comprehensive analysis of the alternatives he finds inferior alongside policy recommendations for nations and sectors to improve their performance.

In *Wither Socialism*, Stiglitz takes this approach with an extensive critique of the theorems on which neoclassical (free market fundamentalism) and socialist (market socialism and socialism) theory rest. Because Stiglitz is engaged in a debate about capitalist markets, he introduces market failures early on. He identifies three different general views of market failures and three dozen problems that create challenges for any political economy. These are summarized in Table 5.4.

Table 5.4 shows the index page references to these challenges where they are defined and demonstrated with examples. Stiglitz cites higher-level market failures to explain the specific challenges, but there are frequently overlapping causes. It is safest and most correct to say that the new and "new, new" categories of market imperfection create a context in which market failures are pervasive.[85]

TABLE 5.4: THE STIGLITZ VIEWS OF THREE TYPES OF MARKET FAILURE AND THREE DOZEN CHALLENGES FOR POLITICAL ECONOMIES

MARKET IMPERFECTIONS	CHALLENGES FOR ALL POLITICAL ECONOMIES	*# of index citations*	*Financial Sector pg. #*
OLD			
Public Goods	Public Goods Expanded	*21*	*211, 226*
Externalities	Broad concept of externalities	*14*	*212, 213*
Inequality	Inequality	*13*	*214*
	Redistribution	*10*	
	Education	*12*	*216*
Weak (insufficient) Competition	Imperfect Competition expanded	*15*	*217*
	Information	*34*	*209*
	Barriers to entry	*13*	*209*
	Rent seeking	*12*	*215*
	Policy	*17*	
NEW			
Institutions	Institutions		209, 216
	Banks	*24*	*209*
	Stock market	*21*	*228*
	Organizational structure	*4*	*226, 227*
TRANSACTION COSTS	Transaction costs	*10*	*209*
	Monitoring & control	*34*	*209, 224*
NEW, NEW			
Information	Innovation	*36*	*207*
Incomplete	R&D	*17*	
Asymmetric	Technology	*7*	
Costly	Resource Allocation	*10*	*208, 221*
Incomplete Market	Capital Allocation	*23*	*209*
Risk	Risk		209
Futures	Futures		209
	Perverse Incentives,	*63*	*212*
	Moral hazard,	*24*	*225*
	Principle agent	*8*	*227*
	Non-economic	*7*	
	Price- Cost	*58*	
	Non-price motivation	*21*	
	Selection	*9*	*209*
	Management independence	*40*	*219, 227*
	Property uncertainty	*14*	*225*
	Coordination	*15*	

Source: Joseph Stiglitz, *Wither Socialism*, (MIT, 1994)

The old view includes market failures generally recognized by economists, although it must be said that extreme market fundamentalists may not accept the widely recognized failures of the market (e.g., Trump), or may not accept the proposition that there is much government can do about them (e.g., Reagan). The second, newer view identifies a broader set of market failures that stems from the important role institutions and transaction costs play in determining the nature and performance of the political economy. If one contemplates the 50 years of economic theory that Stiglitz claims have fundamentally altered thinking about markets and their performance, there are two strong threads in of criticism of neoclassical theory here: (1) the failure to predict the poor performance of markets, and (2) the ability of non-market institutions to meet the challenges that neoclassical economics had claimed only unfettered markets could resolve (i.e., Ostrom).

The array of market failures in Tables 5.4 and the framework Stiglitz built from them (shown in Table 5.3) predict the inadequacy of economic systems that assume markets and competition alone will take care of the economy. The argument goes beyond the theoretical. While Stiglitz starts with a high-level view of market failure and imperfections—responding to and criticizing the standard market theories and explaining why market socialism suffers from the same afflictions— i.e. it is unable to respond to many of the challenges.

6. ANALYSIS OF IMPORTANT SECTORS AND PROCESSES

The final column of Table 5.4 summarizes the example of one of the most important economic sectors – the financial sector – to illustrate Stiglitz's approach. Recall that both Brandeis and Stiglitz believed a well-functioning financial sector to be vital to the success of an industrial capitalist economy. Early in the 20th century, when Brandeis wrote *Other People's Money,* there was almost no regulation of the sector. By the beginning of the 21st century, however, all governments had realized the sector needed to be regulated. However, Stiglitz argues that government attempts at regulation failed to fully understand the nature and extent of market failure associated with the sector. It is important to note that both Brandeis and Stiglitz were living through and analyzing a key moment in technological revolutions. It locates their analyses and actions in the course of those revolutions more broadly.

The third, "new, new" view predicts market failures that result from imperfect information and the related incomplete markets, both of which are similarly inevitable in Stiglitz's view. Over a dozen new challenges are identified. In addition to asymmetric information and incomplete markets (and to a significant degree, underlying them) is the novel field of behavioral economics. However, the new and "new, new" views tend to expand the traditional categories of market failure. The challenges are larger in the more complex and imperfection-ridden systems they describe.

THE FINANCIAL SECTOR

Table 6.1 shows how Stiglitz applies his approach to an important sector. He begins his analysis by identifying the functions the sector is supposed to provide to the economy (and to society). He then uses the full array of market imperfections to explain why policy had failed to effectively address these market imperfections, resulting in market failure. The fourth column gives the page references for his discussion of failures. He begins with the specific functions that were not provided effectively. He then invokes several of the "higher-level concepts" to fill and cement the discussion.

The conclusion that Stiglitz and Brandeis reach at a general level is familiar by now. Without careful policy, competition is too weak, markets too imperfect, and centralized decisions too prone toward self-interest and general failure to yield good decisions and behavior. Competition and the market alone will not provide critically important functions in the economy. Decision makers will exploit informational advantages (asymmetries) to advance their own interests, rather than the interests of others. Even where they would like to do the right thing, they lack or cannot process enough information.

Systems that take the opposite approach and decide to forgo competition and markets (regulated monopoly and socialism) in favor of government administrative approaches, suffer a similar fate. Neither monopolists with government administrators looking over their shoulders nor administrators directly seizing the controls of the economy have the capacity to deal with the complex information, resource allocation, incentive problems, and innovation that an industrial society faces. The basic functions of the economy – providing incentives to achieve short term efficiency and long-term growth through innovation – cannot be assumed. Establishing the "right price" or dealing with the perverse, non-economic motivations is beyond the capability of imperfect competition and incomplete markets. Government officials, who suffer from limitations at least as great as (if not greater than) those of markets are overwhelmed even when well-intentioned and free from perverse incentives.

TABLE 6.1: FUNCTIONS, FAILURES AND POLICY RESPONSES IN THE FINANCIAL SECTOR

Critical Functions of Capital Market	**Erroneous Assumptions of Free Market Fundamentalism about these Markets**	**State Response**
		Policy Detail
Transferring Resources		Extent of competition
Intermediation	Transaction Costs Absent	Size and concentration regulation
Agglomerating Capital	No Economies of Scale	Solvency (1) Bank Insurance
Resource allocation	Rent Seeking	Capital requirements
Specialization	No Information Problems	Solvency (2) Deposit Insurance
Market Power	No Enforcement Problems	Incentive to monitor
Profit v. XS rent	Incomplete Contacts	Transparency
Selecting Projects	No Institutions Needed	Accounting practices
Monitoring	Incomplete Capital Markets	Rating agencies
Enforcing Contacts	Ineffective Corporate Control	Ban on Insider trading
Transferring Shares		Regulation
Risk		Information
Diversification		Solvency
Pooling		Conflict of interest in use of funds
Intertemporal Risk		Macroeconomic stability
		Big Picture Adaptation
		Transformation
		Re-education
		Reform
		Reorganization
		Clean Slate:
		Create new institutions

Source: Joseph Stiglitz, *Wither Socialism*, (MIT, 1994)

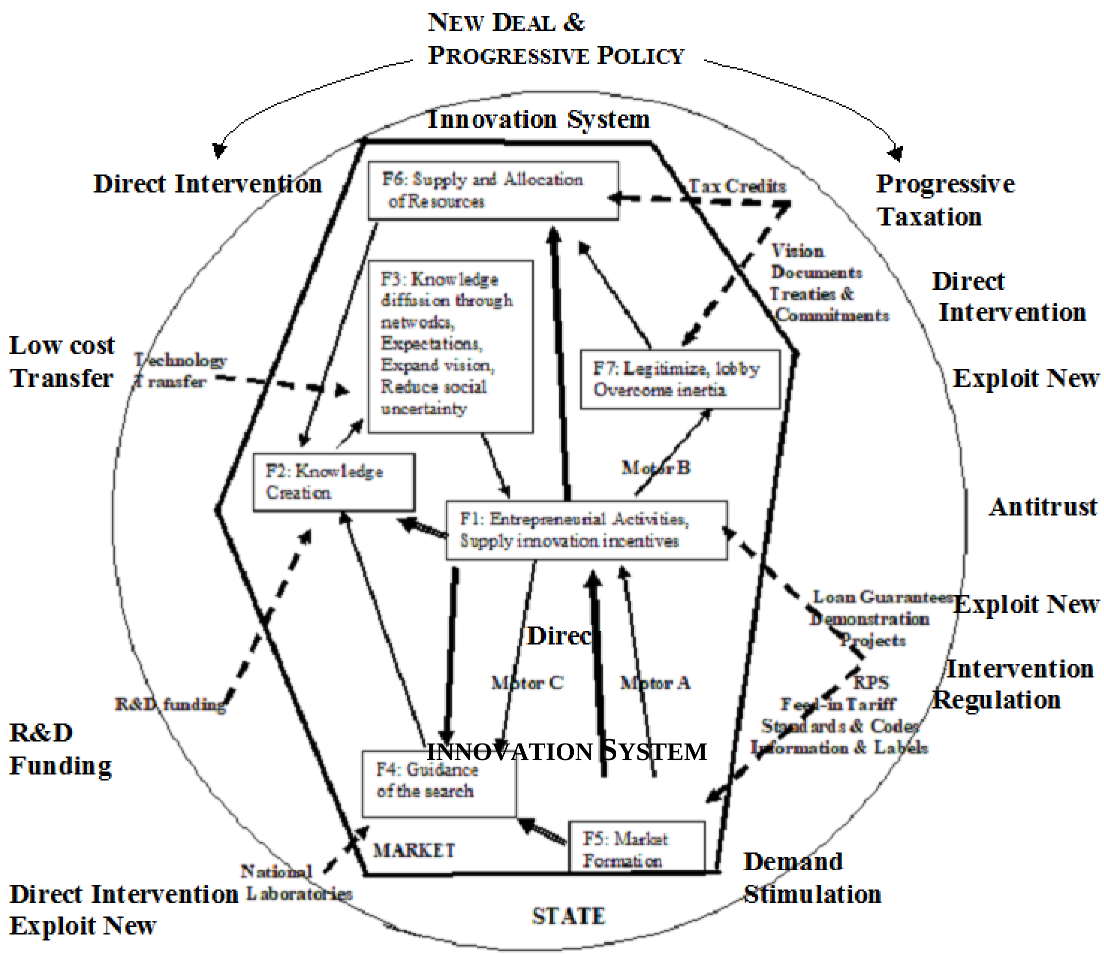
There is no reason to believe that markets will achieve the outcome markets are supposed to – efficient, equitable, long-term growth. The prediction (hope) of success in the presence of asymmetric information and incomplete markets is likely to be very wrong. Strong public policies to guide behavior are needed, but the market fundamentalists, market socialists, and neo-Brandeisian antitrusters believe policies are unnecessary. Consequently, they fail because of their overly optimistic assumptions about the adequacy and power of markets.

Stiglitz ends up exactly where Brandeis did at the general level. He concludes that competition, markets, and decentralization are the pillars on which a successful political economy can and should be built, but they must be embedded in institutions that implement progressive policies to make these constraints on conduct effective. Such institutions include antitrust, regulation, and other progressive policies that directly affect and orient (above all, capitalist) behavior but do not dictate it. I call this the "command but not control" approach.[86]

National Innovation Systems

The Brandeis-Stiglitz model is also consistent with contemporary thinking about innovation. Innovation is at the heart of progress for Brandeis, Stiglitz, and the SCP paradigm. This section brings insights from new innovation literatures to bear on the issue of innovation and the increasingly complex economic system of the digital revolution (see Figure 6.1).

Figure 6.1: Functions, Motors and Policy Foster Virtuous Cycles in the



Source: Innovation system adapted from M.P. Hekkert et al., “Functions of innovation systems: A new approach for analyzing technological change,” *Technological Forecasting & Social Change,* (4) 2007: 426 for solid arrows and motors. Berget, et al., 2008, p. 46, “Analyzing the functional dynamics of technological innovation systems: A scheme of analysis,” *Research Policy,* 37 (3), compound arrows.

One approach that has received a lot of attention is the analysis of “innovation systems,” which takes an institutional and emergent view of technological change similar to that of Brandeis and Stiglitz. The innovation-systems approach defines the system as a series of interrelated functions that determine the speed and nature of innovation. We begin with the inner-market activities that constitute the core of the system and identify the points at which public policy can intervene to promote innovation.

Entrepreneurial activity (experimentation) is at the center of the system (six linkages). Knowledge creation is the next most important node in the system (four linkages).

> The central idea in modern innovation systems theory is the notion that what appears as innovation at the aggregate level is in fact the result of an interactive process that involves many actors at the micro level, and that next to market forces many of these interactions are governed by nonmarket institutions. [87]
>
> The NSI [National System of Innovation] concept represented for policymakers an alternative to industrial policies, while at the same time providing strong support for the role of public authorities in creating the "right" institutional conditions for a knowledge-driven economy to flourish…
>
> A common trigger …is guidance of the search. In this case societal problems are identified, and government goals are set…These goals lead to new resources, which, in turn, lead to knowledge development and increasing expectations about technological options. (Motor C) …when markets are created, a boost in entrepreneurial activities (F1) is often visible leading to more knowledge formation (F2), more experimentation (F1), and increases lobby (F7) for even better conditions and high expectations [F3] that guide further research (F4).[88]
>
> Not surprisingly, economists in the institutional tradition of innovation studies and scholars of evolutionary theories became the strongest proponents of the notion of systems of innovation. In these views the system of innovation is a continuous process where institutions (habits and practices), learning, and networks play a central role in generating innovation and technological change. [89]

The above quote suggests that policymakers saw the innovation system approach as a way to escape the shackles of industrial policy. In fact, as I noted in the discussion of the SCP paradigm, there were no such shackles. The problem was that the dominance of free market fundamentalism imposed a narrow view of markets that misunderstood the role of the state all along. The proper basis for bringing in the state was the broader critique of free market fundamentalism and the argument that the state never left – rather, policy had headed in the wrong direction.

The larger field of the analysis of innovation diffusion has grappled with exactly the same market failure issues discussed above. A major source of tension in the innovation diffusion field flows from the approach to modeling behavior and process; efficient market hypothesis underlying neoclassical economics v. institutional, transaction and behavioral economics views of imperfect markets as summarized in Table 6.2.

> The issue relates to whether the diffusion process should be formalized as [*neoclassical equilibrium*]… with diffusion patterns reflecting a sequence of shifting equilibria over time in which agents are fully adjusted…modeled as being infinitely rational and fully informed… or as a disequilibrium process… modeled as being constrained by lack of information or understanding on the part of adopters about the worth of an innovation.[90]

TABLE 6.2: CRITIQUE OF THE MARKET FUNDAMENTALIST INNOVATION DIFFUSION MODEL[91]

<u>Neoclassical Equilibrium System</u>	<u>Evolutionary Disequilibrium</u>	<u>Contemporary Criticism</u>
		Endemic/New Economic/Transaction
Newtonian mechanics	**Evolutionary biology**	**Raises questions about efficient market hypothesis in the face of persistent imperfect competition, complex, unpredictable dynamic processes.** **Questions about ahistorical analysis that assumes markets are always efficient, predictable, driven by equilibrium mechanism that follow mechanistic laws in static analysis of continuous & quantitative equilibria**
Mechanistic laws	Interconnected systems	
Static	Dynamic	
Equilibrium mechanism	Disequilibrium mechanism	
Individual	Institution as means and ends	
Closed system	Open system due to unpredictability & Choice	
Risk	Uncertainty (Keynesian/Knightian)	
<u>**Market Process**</u>		
Equilibrium mechanism	**Disequilibrium mechanism**	**Contradicts the assumption that economies are closed systems where individuals are the unit of analysis while institutions, risk uncertainty (Keynesian/Knightian) and transaction costs are given little weight**.
Continuous & quantitative	**Continuous & quantitative (Darwinian)** **Discontinuous & qualitative (non-Darwinian)**	
Predictable	**Unpredictable**	
Exogenous/endogenous	**Necessarily endogenous**	
Diffusion ahistorical	**Path-dependent (historicity)**	
<u>**Market Outcomes**</u>		**Structural**
Efficiency	**Efficient (Darwinian)** **Possible inefficiency (non-Darwinian)**	**Raises questions persistent imperfect competition, vertical integration,** **Failure of private investment to prevent negative externalities or create and exploit positive externalities** **Refuting claims that government is problem and social policy is an unnecessary burden**.
Markets are efficient	Market failure is substantial and pervasive	
Government is part of the problem	Government provides solutions with social policy as means and end for development	
<u>**Individual Actors**</u>		**Behavioral**
Full/limited information	**Necessarily limited information**	**Rejecting the assumption of individual actors as utility maximizers who are fully informed, rational individuals that execute perfectly. Recognizing, prospective, social influences, heuristics, and satisficing behavior.** **And, the resulting ability to manipulate and exploit consumers.**
Infinite rationality	**Bounded rationality**	
Utility as an end	Capabilities as means and ends	
Infinite rationality	Bounded rationality	
Individual utility maximizers	Socially grounded satisficers	
<u>**Welfare Economics & Policy**</u>		**Political Economy and the End of Value Free**
Wealth = utility	Wellbeing = capabilities	**Mistake at the individual level, of equating wealth with utility for under the assumption of uniform marginal value of wealth.** **Mistake at the societal level the assumption that total social surplus is all that matters, and inequality is unimportant.** **Desire, effectiveness and inevitability of political actions to influence policy for advantage.**
Uniform marginal value f wealth	Declining marginal value of wealth	
Total social surplus is what matters	Distribution of surplus matters between producers and consumers among consumers	
Inequality does not matter In fact, more may be better to squeeze surplus out of labor at the bottom	Excessive inequality is harmful: raise the floor to support a refined division of labor with sufficiency, security & Support and smooth functioning mobility to elicit	

Source: Jayati Sarkar, "Technological Diffusion: Alternative Theories and Historical Evidence," *Journal of Economic Surveys* 12 (1998), presents Sarkar, 1998

The dramatic difference between the approaches to the analysis of innovation diffusion parallels the division in the efficiency gap debate closely, as the side-by-side comparison of the two dominant approaches summarized in Table 6.1 shows. The broad critique of the neoclassical economic model, echoed in the efficiency gap debate, rested primarily on the fact that the underlying assumptions of infinitely rational/fully informed actors in the neoclassical model does not fit real world behaviors at all.

> As Simon stressed in his Nobel Memorial Lecture, the classical rationality requires knowledge of all the relevant alternatives, their consequences and the probabilities, and a predictable world without surprises. These conditions, however, are rarely met for problems that individuals and organizations face. Savage, known as the founder of modern Bayesian decision theory, called such perfect knowledge small worlds… In large worlds, part of the relevant information is unknown or has to be estimated from small samples, so that the conditions for rational decision theory are not met, making it an inappropriate norm for optimal reasoning. In a large world…one can no longer assume that "rational" models automatically provide the correct answer.[92]

At a much higher level, but with a similar thrust, are recent theories of *Why Nations Fail,* or succeed over the long term, especially in responding to *Technological Revolutions.* Combining the two cited above, it is clear that the central findings of these discussions of why nations succeed support the main principles on which the pragmatic, progressive capitalism rests.

- Policy plays a central role
- Innovation, that leads to creative destruction plays a central role in progress, but
- Creative construction, building institutions to routinize all social activity around net technologies, is just as important
- Progressive policy is crucial to long term stability and growth, which
- Demands inclusive policies in the economy and the polity.

WHY NATIONS SUCCEED

Needless to these are complex topics that demand a great deal of discussion and I have done so elsewhere. Here I extract key observations and then show how they fit into the Stiglitz analysis, providing a brief discussion of the long-term processes summarized in Figure 6.1.

The Inclusive Political Economy

For Acemoglu and Robinson, the essential characteristic of successful nations is inclusiveness in both political and economic institutions,[93] which is also an essential feature of a progressive capitalist economy where the state has a prime-mover role, [94] as noted by North. Political institutions establish the framework of rights necessary to ignite the success of the market through investment and innovation. In the polity, they emphasize inclusive processes that create an environment of security. Cooperation is facilitated through the critical role of a centralized and active state establishing the necessary conditions.[95] Cooperation was one of Brandeis's main goals; the failure to achieve it one of his main complaints.

Acemoglu and Robinson date the first progressive turn of the capitalist political economy to the 1820s and 1830s, long before Marx's conclusion that capitalism was doomed to extinction. They argue that Marx's laws fail.

FIGURE 6.2: MODELS OF THE LONG-TERM SUCCESS OF POLITICAL ECONOMIES

Inclusiveness as the key to a successful Political Economy

Institutional drift
Virtuous circles > In & between economy &polity
reinforces progressive institutions
Inclusive polity>Inclusive economy
Contingent > Critical juncture successfully manages
promote innovation & investment
Technology > Creative destruction
Institutional drift > Inclusion

Daron Acemoglu and James A. Robinson, *Why Nations Fail,* (Crown, 2012);

The Interconnected Roles of the State and the Market in Industrial Revolutions

Declining rate of profit
Ensure sufficient demand
Provide social guidance
Create effective regulation
Advance market creation
Deploy infrastructure
Provide initial market
Facilitate innovation
Fund basic research
Define basic rights:
Policy and Politics.

Mass diffusion & adoption
Technological lock-in
Technical-economic instability
Finance capital funds innovation
Technical-scientific invention

Training/Educations
New common sense
Norms
Lifestyle
Routinize Economic Relations

STATE **MARKET** **SOCIAL INSTITUTIONS**

Carlota Pérez, *Technology Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages.* Northampton, MA: Elgar Publishing, 2002.

> Mostly because they ignored both the endogenous evolution of technology...and the role of institutions and politics that shape markets, prices and the path of technology...The distribution of the gains from new technologies was also shaped by an evolving institutional equilibrium. The Industrial Revolution went hand-in-hand with major political changes.[96]

"Technological change is only one of the engines of prosperity, but it is perhaps the most critical one."[97] Technology is certainly not sufficient in and of itself. In the economy, the argument uses the same critical elements noted in the previous discussion – private property, inclusive markets, competition, innovation, and mass participation.

> Inclusive Institutions...are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and then enable individuals to make the choices they wish. To be inclusive,

> economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract; it also must permit the entry of new business and allow people to choose their careers.[98]

The role of the increasingly refined and advancing division of labor is also identified as central to the process of progress. Intimately linked to technology are the education, skill, competence, and know-how of the workforce, acquired in school, at home, and on the job. But there is more to skill and competency than just the ability to run machines. The education and skill of the workforce generates the scientific knowledge upon which progress is built, while simultaneously enabling the adaptation and adoption of all these technologies to diverse lines of business.[99] The similarity to Brandeis is precise.

Acemoglu and Robinson give the state the prime-mover role, arguing that political institutions must establish the framework of rights necessary to ignite the success of a market driven by investment and innovation. "[W]hile economics institutions are critical for determining whether a country is poor or prosperous, it is political institutions that determine what economic institutions a country has."[100] In the polity, they emphasize inclusive processes that create an environment of security where cooperation is facilitated through a centralized and active state that establishes the necessary conditions. Inclusive political and economic institutions set constraints on actions and promote a more equitable distribution of power and income.

> Once in place, the notion of the rule of law not only kept absolutism at bay but also created a type of virtuous circle: if the law applied equally to everybody, then no individual of groups. could rise above the law, and common people accused… still had the right to a fair trial.[101]
>
> Inclusive economic institutions... are forged on foundations laid by inclusive political institutions, which make power broadly distributed in society and constrain arbitrary exercise. Such political institutions also make it harder for others to usurp power and undermine the foundation of inclusive institutions. Those controlling political power cannot easily use it to set up extractive economic institutions for their own benefit. Inclusive economic institutions, in turn, create a more equitable distribution of resources, facilitating the persistence of inclusive political institutions.[102]

The contrast between the inclusive and exclusive political economies offered by Acemoglu and Robinson is a road map to the difference between a decentralized, inclusive architecture and the threat of a centralized, exclusive model. Table 6.3 summarizes their model with three categories of elements. For each column, I provide page references. In the left-hand column is a general definition of the domain, institutions, and functions. In the middle column, I identify the specific qualities of an inclusive political economy that are conducive to its success. In the right-hand column are the characteristics of an exclusive political economy that assure its failure.

TABLE 6.3: INCLUSIVE V. EXCLUSIVE POLITICAL ECONOMIES

INCLUSIVE POLITICAL ECONOMY[a]		**Exclusive Political Economy [a]**	**Market**
Domain/Institutions/Functions	**Specific traits (74)**	**General**	**Fundamentalism [b]**
Technology (75)	Innovation (202), Synergies *81	Threat leads to selective application (84)	*234-235*
Productivity, Efficiency	Creative Destruction (103)	Incumbent defense of skill & assets (86)	*17-18*
Expand Markets (194-195)			
Economic	Incentives (313)		
Inclusive Markets (74, 78)	Efficiency, savings, investment	Extractive, exclusive monopoly (81)	*15*
Division of Labor (78)	human capital, innovation (313)		
Private Property (74-77)		Expropriation (37, 81)	
Competition (35) (194-195)	Dynamic development (94)	Stagnation/Static re-allocative growth (92)	*312-313*
Entry (39)	Easy	Barriers (81) blocking, licenses, red tape,	*15, 89*
	Education, savings, adoption investment	Coercion (149) Fear of Expropriation (222)	*xvi, xii*
Innovation (77)	Technology (79), Education (78)	Stifled (231-232)	*184*
Democratization (33)	Patents (32-34)		
Banks (447-448)	Access to capital (33)	Cronyism (400)	*xvi, 108-119*
Mass Participation (74)	Equitable Distribution (82, 314)	Inequality (44), Elite wealth (91-92)	*xvii, 15-17, 152,*
Labor markets (43)	Education (317) Mobility Human capital		
Choice (73)	Expectation Living Standard (73),	Resentment, grievances, migration (41)	*21*
	income diet, clothing, light, heat	Coercion,	*80-81*
		Poverty (184,216) life expectancy (184)	*xvi, 212-213*
Political (81)			
Inclusive – Pluralistic (195)	Emergence & empowerment of	Absolutist, Infighting – coup d'etat (95)	*233-234*
Restraint on power (82, 307)	diverse interest (455-462) &		*114*
slow extension of rights (310)	access to positions (284)		*231-233*
Logic of pluralism (304-307)	Lowers stakes of lost power (93) vote equal	Iron law of oligopoly (111-112)	*xix*
	constituencies, secret ballot, regular parliament,	lower reward & likelihood of success,	
	paid representatives	raise cost of suppression (312)	
Media (325)			
Coordination Problem	Stability (31, 37)	Hierarchy, order, suppression	*18*
The centralized state (75-76)	Unbiased Law (43) Exchange & Contract (194-195)	Secure property, Law & Order Arbitrary	*15, 80-81, 164, 234-235*
Regulation/ Professional/ Expert,	open Recruitment, Meritocracy (316)	Corrupt	*50*
Tax policy (194-195)	Neutral/ redistributive (317)	Extractive, favors static	*xvii, 185*
Labor law (316-317)	Develop human resources/ capital (78)	Exploit cheap labor (223-224)	*xvii, 168-169,*
	health, wage, education social security		
Public Services/	Favors dynamic (284)	Undeveloped	*xvi, 231-233*
infrastructure	Roads (76) Ports (437)		
Social Norms (57)	Trust (x43, Expectations (74)	Distrust, internecine "winner-takes-all	*xvi*

Source: [a]Daron Acemoglu and James A. Robinson, *Why Nations Fail,* (Crown, 2012); [b]Joseph Stiglitz, *People, Power and Profits* (Norton, 2019)

Looking at the first two columns, I find about 50 of the 100 elements in the Brandeis Progressive Protocol. The 50 elements in the Acemoglu and Robinson discussion are spread across the four major categories of the Brandeis model. Two-thirds of the elements that are missing are specific subcategories of major elements. This lends strong support to the Brandeis-Stiglitz model of progressive capitalism I put forward in this paper. It is also notable that the characteristics of the exclusive political economy include many of the criticisms Stiglitz offers of the Trump administration.

In the fourth column, the italic page numbers refer to Stiglitz's critique of the extreme market fundamentalist model. Dominant entities in the exclusive political economy tend to: a) be extractive monopolists, b) be selective in the applications that are developed, and c) build barriers to entry, all of which protect their skills and assets. Cronyism and the threat of expropriation further chill entry. Policy is explicitly, extremely and aggressively not expert, neutral, open, or objective (meritocratic). The effect is to stifle innovation, emphasizing stability and static, re-allocative growth.

Capitalism, Technological Revolutions and Progressive Policy

Carlota Pérez develops a model of technological revolutions that extends Schumpeterian analysis in several ways. She argues that "creative destruction" applies as much to social institutions as economic, in large part because institutional innovation occurs much more slowly than economic innovation. Therefore, decades of "creative construction" are necessary and, in many senses, more important. A long period of institutional recomposition is necessary.

In both the Acemoglu and Robinson model and the Perez model, political institutions—above all, the state—determine the context for capitalism (particularly the division of labor) by defining rights, such as property rights, contract rights, labor relations, and so on. Perez goes farther, as does Stiglitz. Beyond the foundational role of defining property, the state fosters innovation by supporting important early activities, including research and development, market creation, and infrastructure deployment. It appears to become less active as the new technical-economic paradigm spreads, but becomes active again when the bubble of development bursts, making a strong comeback through the process of institutional recomposition to create a stable path of development.

The market and the state are the main performers. They join in a complex dance – one based not on a love/hate relationship, but a love/tough love relationship. The market is always the central economic institution. In the early days of the emerging political economy, the free market leads the installation of the technical-economic paradigm upon which the political economy will be built, developing under the conditions the state has created. As the political economy matures, the state must reduce excesses of the market and build institutions to support a stable development path. That means constraining the market with policy in some ways and giving it direction by expanding incentives in other ways. The state's role is the mirror image of the market. The state is always required to be courageous and strong, but the nature of its activity changes. In the early period, it is the facilitator of the installation of the technical-economic paradigm. In the later period, it must exercise greater influence over the direction for broad deployment.

The financial sector is also crucial at the turning point, when, after its initial successes and its inevitable excesses lead to a bubble that bursts, it becomes necessary to impose constraints on the financial sector. This parallels Brandeis and Stiglitz, as discussed above, both of whom recognized the critical nature of finance but complained about its failure to fulfill its proper function. The need to impose discipline in the process of institutional recombination highlights the central and shifting role of the state. "Though the role of free markets was crucial in the early decades of diffusion of the ICT revolution, their continued unrestrained and unguided operation can only aggravate the tensions inherited from the casino economy and the income polarization of the 1980s and 1990s."[103]

Creating regulatory institutions is one of the central activities of institutional recomposition (the other two being taxation and antitrust).[104] This period involves significantly redefining the division of labor and redistribution of surplus to support a massive increase in demand. The state again appears to become less active as the institutions become routinized. The key to successfully transitioning to a stable growth path at the critical juncture has been a turn toward progressive policies of a strong state. The seeds of the next round of creative destruction and construction are planted in the slowdown of the maturity phase and the process is repeated.

PART IV:
THE SUPERIOR PERFORMANCE OF PRAGMATIC PROGRESSIVE CAPITALISM

7. AN ECONOMETRIC EVALUATION OF ECONOMIC PERFORMANCE: FREE MARKET FUNDAMENTALISM V. PRAGMATIC PROGRESSIVE CAPITALISM

This chapter addresses the next step in reintroducing the electorate to the success of progressive capitalism. It does so in a way that Brandeis stressed – it looks at the data. It examines economic performance under progressive policies compared to periods dominated by the market fundamentalist approach. When reintroducing the progressive capitalist model, the first question is whether the "Golden Age" of progressive capitalism deserves the praise Stiglitz gives it. We build the bridge between Brandeis and Stiglitz by re-analyzing a recent paper by Mark Glick that offers a rich data set covering almost 150 years (from 1869-2015).

PERIODIZATION AND VARIABLES

The data I use to test Stiglitz's key argument are from a paper by Mark Glick, which identifies the same four political economies in more contemporary but essentially identical terms.[105] The central theme of Stiglitz,[106] Glick,[107] antitrust experts,[108] and many others is that the market fundamentalists have been proven wrong. Table 7.1 shows the data set used to test the hypothesis that progressive capitalism is a superior political economy to neoliberalism. There are three columns in the table that describe key aspects of the analysis: the characterization of periods, the variables, and the key statistical characteristics of the measures.

In the left column, I show traditional periodization. Marking the beginning and end of dominant policy that defines periods is always difficult. Execution takes time to ramp up and weakens as policy ramps down. Traditionally, the Progressive Era is marked at the federal level at 1887 with the enactment of the Interstate Commerce Act, although it started earlier at the state level. The New Deal period is traditionally defined from the election of Roosevelt to the post-WWII demobilization (1933-1946). Glick defines the "Golden Age of Capitalism" as the period from 1947 to 1972. This is consistent with Stiglitz's description.

Less traditional but equally important is the proposition that the Roaring Twenties were hardly progressive in enactment or enforcement of policy. Indeed, one can argue that WWI (much like WWII) was a disruption. I label this period the Post-WWI Roar, reflecting the label traditionally applied to the 1920s.[109] Glick also identifies a crisis period of 1973-1979, which saw the rise of neoliberalism. Whether the crisis should be considered part of late progressive capitalism or early neoliberalism is debatable. Neoliberals like Bork were certainly roaring, and Republican presidents (Nixon/Ford) were followed by a conservative Democrat (Carter) before Reagan moved the political economy sharply to the right. Following Stiglitz, who wrote a searing critique of the Clinton administration just two years after it ended entitled *The Roaring Nineties*, one can easily argue that the Clinton administration did not constitute a break from free market fundamentalism, but a return to the very market fundamentalist ideology of the Post-WWI Roar.[110]

Unlike the Clinton presidency, I am not convinced that the Obama administration should be considered part of the neoliberal period. Keynesian stimulus in response to the Great Recession (constrained by market fundamentalists in Congress and a concern about "deficits" that has evaporated under Trump), the Affordable Care Act, rejection of and/or stiff conditions imposed on communications sector mergers, network neutrality rules, finding anticompetitive conduct in business data services, recognition of the privacy problem in digital communications, and extensive increases in regulatory efforts to protect public health and safety and deal with climate change were a sharp break with the Bush administration (and even the Clinton administration). Thus, I do not treat the Obama years as part of the period of neoliberal dominance. Since the data set ends in 2015, I do not deal with the Trump administration. But as Stiglitz argues, and I have shown elsewhere,[111] l show in the next chapter, it is an extreme form of free market fundamentalism.

TABLE 7.1: IDENTIFICATION OF PERIODS AND VARIABLES

Traditional Periods of U.S. Political Economy

Gilded Age (1869-1886)
Progressive Era (1887-11916)
Post-WWI Roar (1917-1932)
New Deal (1933-1946)
Golden Age of Capitalism (1947-1972)
Rise of Neoliberalism (1973-2015)
Rise of Neoliberalism
Crisis of the 1970s (1973-1979)
Neoliberal Dominance (1980-2008)

Long Periods

Free market fundamentalism
- Gilded Age (1869-1886)
- Post-WWI Roar (1917-1932)
- Neoliberal (1980-2008)

Progressive Capitalism
- New Deal (1933-1946)
- Golden Age (1947-1970)

Transitions
- Progressive Era (1887-1916)
- Crisis (1970-1979)
- Obama (2009-2015)

Data: Measures of Economic Performance

Variable	Availability	Stationarity
Profit Rate	1869-2015	Underlying
GDP Growth	1870-2015	Adjusted
Labor Productivity	1869-2015	Adjusted
Real Wage Growth	1870-2015	Adjusted
Income Distribution	1913-2015	Underlying
Investment Growth	1930-2015	Adjusted
Unemployment Rate	1947-2015	Adjusted

Data sources and notes

Stationary refers to whether there is a trend in the data that must be controlled in order to avoid attributing explanatory power to the other variables that should be attributed to the trend.

Mark Glick, "Antitrust and Economic History: The Historic Failure of the Chicago School of Antitrust," *Institute for New Economic Thinking*, Working Paper No. 95, May 2019, describes the sources and data as follows in Appendix I:

G. Duménil, D. Lévy, "The Historical Trends of Technology and Distribution in the U.S. Economy. Data and figures (since 1869)."
Profit Rate: Profit / Capital: r = Π/K
GDP Growth, Growth rate of real GDP: growth rate of GDPR
Labor Productivity: Growth rate of labor productivity per worker: PL = NDPR/L
Real Wage Growth: Growth rate of real Wages where the annual wage of a worker in constant 2009 dollars is wR = w/p

Income Distribution: income tax statistics. Full details on the construction of the series are provided in appendix of Piketty and Saez (2006): http://emlab.berkeley.edu/users/saez/piketty-saezOUP04US.pdf, Growth rate of gross Private Domestic Fixed Investment, Billions of Dollars, Income share (including capital gains) of top 1% in the United States (fractiles are defined by total income including capital gains).

Investment Growth: BEA, NIPA Table 1.1.5 line 8, Growth rate of gross Private Domestic Fixed Investment, Billions of Dollars

Unemployment Rate: Federal Reserve Bank of St. Louis Database, Civilian Unemployment Rate, Percent, Annual, Seasonally Adjusted

Thus, I define three periods as free market fundamentalism.[112] This includes the Gilded Age, the Post WWI-Roar, and Neoliberalism. I define two periods as progressive capitalism, covering the New Deal and the Golden Age. This leaves three transitional periods that are extremely important for marking the emergence of a possible alternative political economy, but less instructive in indicating what that political economy would look like in full implementation. The statistical analysis shows these transition periods are generally between the two major political economies of the past century and a half. The data in Table 7,1 are listed in order of the years of coverage along with a description of how underlying trends are handled for each.

To be cautious in the following econometric analysis and uniform in the econometric analysis, I introduce a trend term in every estimation. I also report robust standard errors. Since these are short historical periods (e.g., 39 years for progressive capitalism and 28 years for neoliberalism), I report the full range of statistical "significance" of outcomes as defined by t-statistics: 0 is t<1, coefficient smaller than its standard error, 1= is t>1, but less than 1.96, t-larger than standard error, 2 is t significant at the 10% level, 3 is t significant at the 5% level; 4 is t significant at the 1% level, 5 is t significant at the .01% level, 6 is t significant at the .001% level).

Table 7.2 summarizes the periodization with one of the key variables – inequality. While it is one of the variables on which progressive capitalism is most clearly superior, it is also one of the most import in the overall framework for both Brandeis and Stiglitz. Inequality increased dramatically during market fundamentalist periods and declined sharply during periods of progressive capitalist policy. Changes in the transition periods were much smaller.

TABLE 7.2: PERIODIZATION AND MEAN CHANGES IN INCOME OF TOP 1%

Free Market Fundamentalism			Progressive Capitalism			Transitions		
	Wealth	Income		Wealth	Income		Wealth	Income
Gilded Age	+80	NA				Progressive Era	-20	NA
Post-WWI Roar	+37	+43	New Deal-Golden	-58	-56	Crisis	+ 9	-8
Neoliberalism	+70	+109	Golden Age	-22	-7	Obama	+10	+5

Figure 7.1 shows two measures of inequality graphically. The first graph in Figure 7.1 is based on the income data used in the econometric analysis below. Income is one dimension of inequality and it is generally constrained in coverage by the imposition of income taxes (1913). The second graph shows the distribution of wealth from a recent study, which I have extended by looking at other sources. The striking observation in both is that market fundamentalist periods were marked by dramatic increases in inequality, while progressive capitalism periods were strongly marked by the opposite. The recent transition periods (crisis and Obama) tended to be somewhat "flatter" at the end.

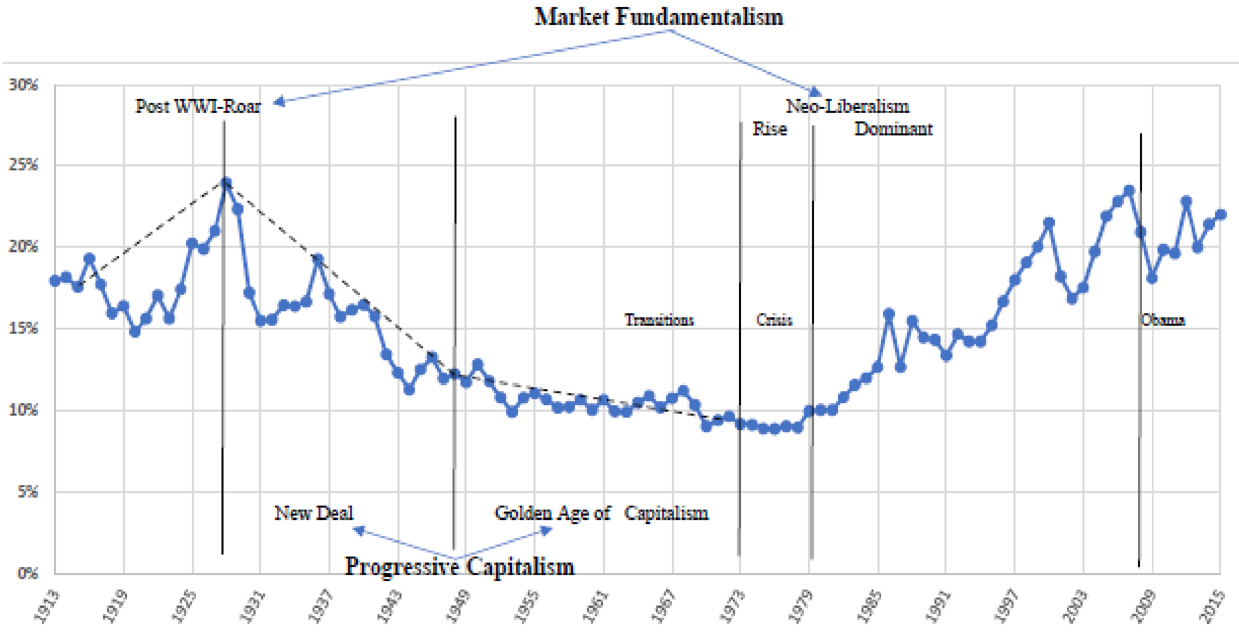
ECONOMIC PERFORMANCE

Figure 7.2 presents the statistical analysis of economic performance of neoliberalism, which is the contemporary descriptor widely used for free market fundamentalism compared to progressive capitalism. Table 7.3 presents the results in tabular form, making it easier to visualize the results.

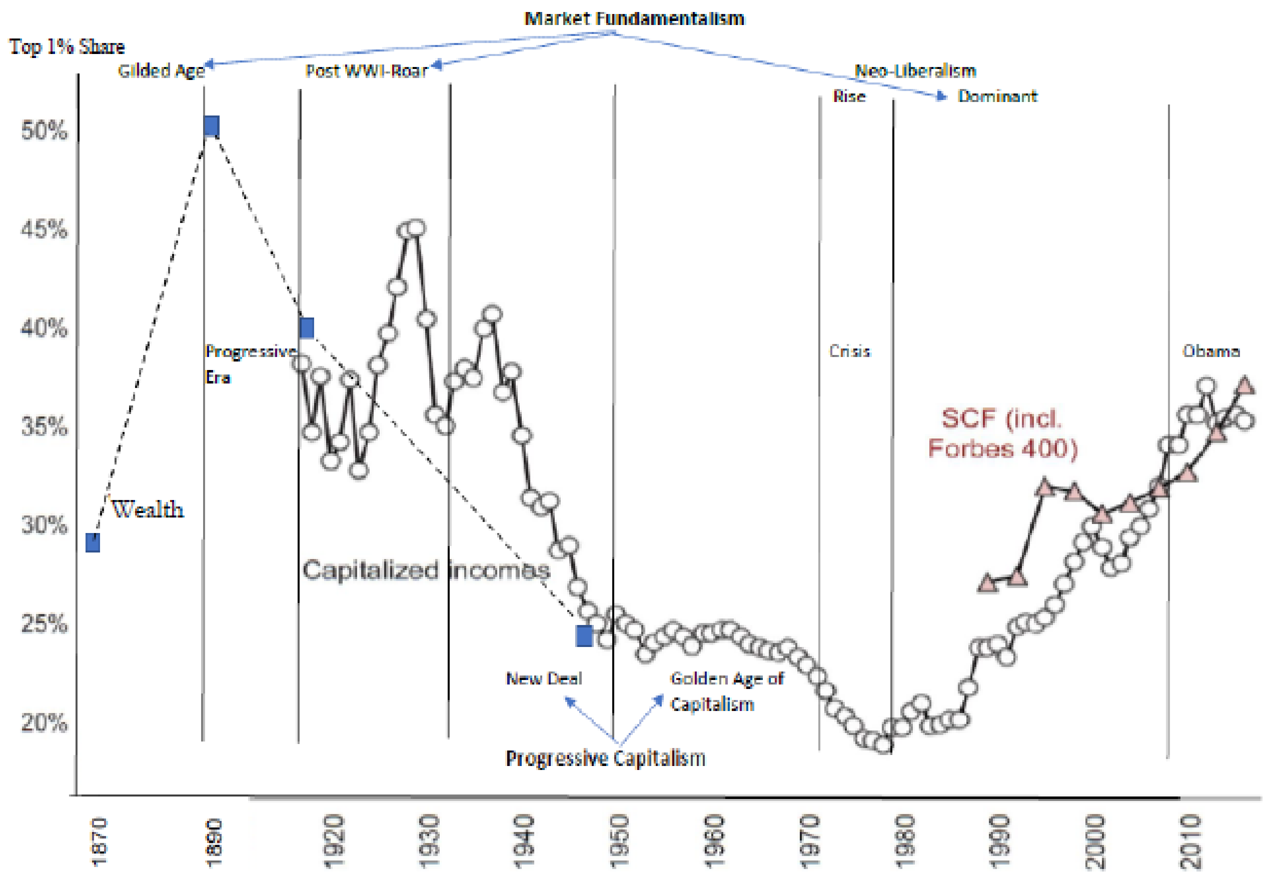
.

FIGURE 7.1 PERIODIZATION AND CHANGES IN INCOME OF TOP 1%

Income



Wealth



Source: Gabriel Zucman, *Global Wealth Inequality*, National Bureau of Economic Research, Working Paper 25462, January 2019.

FIGURE 7.2: PROGRESSIVE CAPITALISM, SUPERIOR BY EVERY MEASURE
(Robust Standards Errors, Beta Coefficients, with Trend Control)

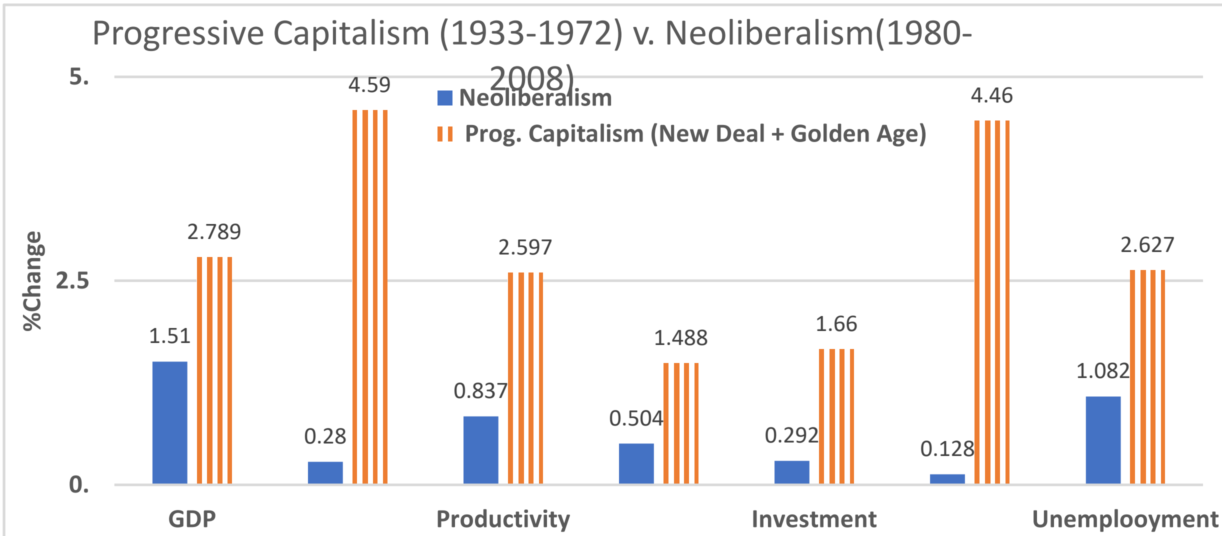


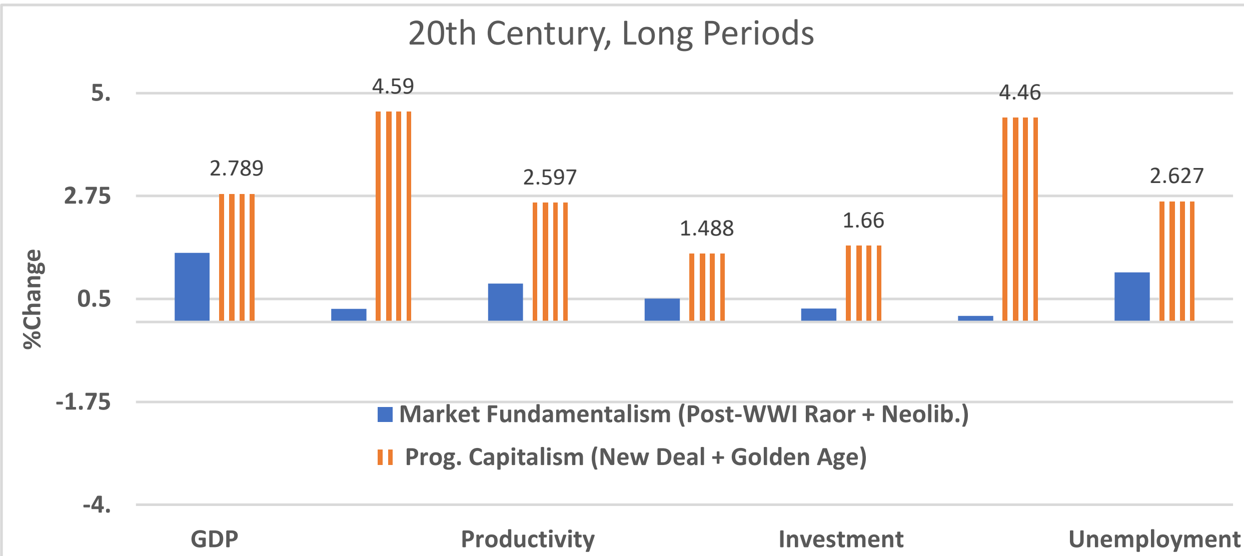
TABLE 7.3 PERFORMANCE MEASURES UNDER PROGRESSIVE CAPITALISM V. NEOLIBERALISM ECONOMETRIC RESULTS
(Beta Coefficients and Significance)

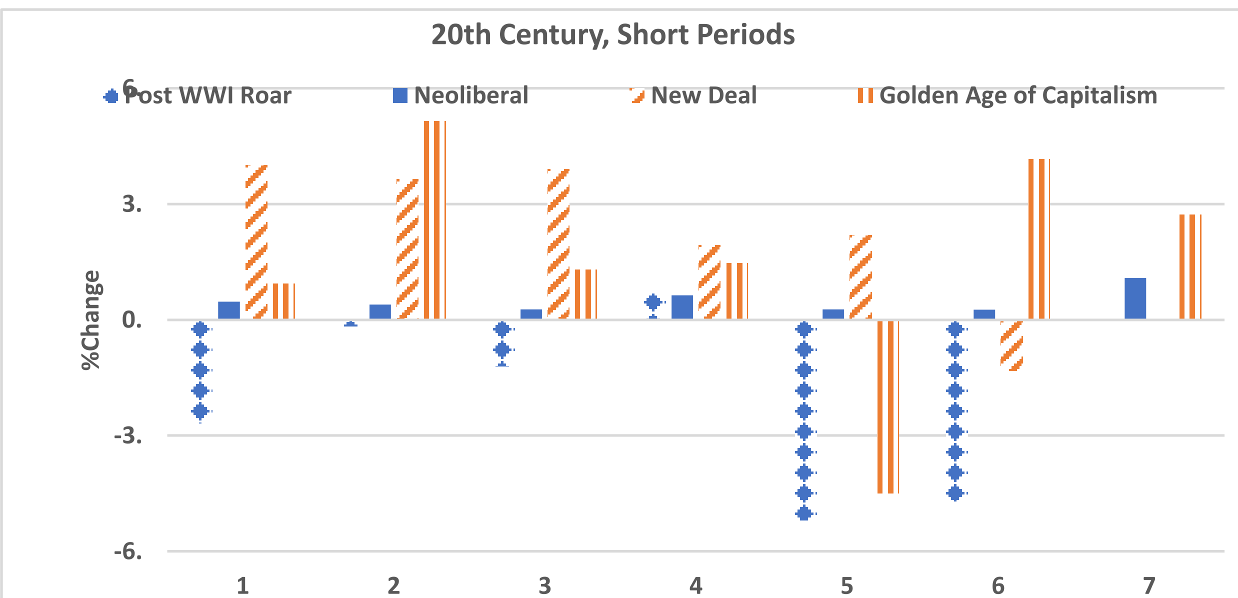
Crisis Attribution	None		Prog. Cap.		Neo Lib		Glick Simple Means	
	Neolib.	Prog. Cap.	Neolib.	Prog. Cap.	Neolib.	Prog. Cap.	Neolib.	Golden
Measure								
GDP	1.51	2.789	2.41	3.215	2.38	3.293	2.51	3.88
Profit	0.28	4.59	1.422	4.906	1.589	5.178	16.86	19.96
Productivity	0.837	2.597	1.235	2.497	0.876	2.681	1.18	2.636
Wage	0.504	1.488	0.66	1.35	0.368	1.469	1.12	2.28
Investment	0.292	1.66	1.244	2.692	1.479	2.64	-6.42	-4.77
Income	0.128	4.46	3.073	6.979	5.413	6.626	5.25	5.95
Unemployment	1.082	2.627	2.054	3.538	2.815	5.876	-17.01	-10.61
Significance Levels: 0 < S.E., 1 > S.E., 2 = .1, 3 = .05, 4 = .01, 5 = .001, 6 =.0001								
GDP	1	5	1	6	1	6		
Profit	0	6	1	6	1	6		
Productivity	0	6	1	6	0	6		
Wage	0	6	0	5	0	5		
Investment	0	5	4	6	6	6		
Income	0	6	5	6	6	6		
*Unemployment	4	6	5	6	6	6		

Investment divided by 10 to preserve scale. All variables coded so that positive numbers indicate better performance.

Figure 7.3 presents analysis of two other periodizations. The upper graph shows the long periods of free market fundamentalism compared to progressive capitalism. The lower graph shows the shorter periods that cover the stretch from 1870 to 2005. The above conclusion holds, although the statistical significance varies because of missing data and a smaller number of observations in some periods. Progressive capitalism outperforms free market fundamentalism on every measure. The four periods we have identified in the 20th century (for which the data are almost complete) follow the same pattern

FIGURE 7.3: PROGRESSIVE CAPITALISM, SUPERIOR IN EVERY PERIOD
(Robust Standards Errors, Beta Coefficients, with Trend Control)





Significance Levels: 0 < S.E., 1 > S.E, 2=.1, 3=.05, 4= 01, 5=.001, 6=.0001

PERIODIZATION, ELECTIONS, AND SHIFTS IN POLICY

The discussion of policy periods relies partly on election outcomes, although policy can take time to implement even after an electoral shift. Brandeis and Stiglitz emphasized the importance of popular participation and elections as one of the primary expressions of a domestic political economy. Having taken a political economy view and charted the birth of progressive capitalism in the progressive era and (most importantly) in the Second New Deal, a brief look at elections is in order. As Table 7.4 shows, elections matter.

As noted above, the 1912 election featured the main political economies competing vigorously at a time of unrest. Brandeis argued forcefully that the Progressive Party under Roosevelt had opted for regulated monopoly in contrast to the Democrats under Wilson who stood for regulated competition. The socialists/communists got their largest popular votes of the century (6%), although they never won any electoral college votes. The Republicans under Taft were pure free marketeers and did very poorly in both the electoral college and the popular vote.

TABLE 7.4: ELECTION RESULTS AND ECONOMIC PERIODS

	1912		1916		1932		1980		1992		2000		2008		2016	
Party	**El..Coll**	**Vote**	**El.Coll**	**Vote**	**El.Coll**	**Vote**	**El. Coll**	**Vote**	**El.Coll**	**Vote**	**El.Coll**	**Vote**	**El.Coll**	**Vote**	**El.Coll**	**Vote**
Presidential Elections																
Democrat	82%	43%	52%	49%	89%	57%	9%	41%	69%	43%	49%	48%	68%	53%	43%	48%
Progressive/ Other Left	17	34					0	0	0	0	0	3	0	1	0	1
Socialist/ Communist	0	6	0	3	0	3	0	0							0	0
Republican	2	24	48	40	11	40	91	51	31	37	50	48	32	46	57	46
Conservative			0	1	0	0	0	8	0	19	0	1	0	1	0	4
Congressional Elections																
Democratic Change																
House	**Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**	**Change Seat #**	**% of Body**
	+64	67	-69	44	+91	72	-29	55	-11	59	+5	48	+21	59	-5	55

In Table 7.4, I include the three elections since the turn of the 20th century that swung policy in a progressive direction (1912, 1932, 2008), as well as those that swung it back in the opposite direction (1916, 1980, 2016). This generally speaks to the mandate the president-elect can claim. Although Wilson won in 1916, his share of the electoral college vote declined dramatically, while Republicans increased their share of both electoral college and popular votes. This set the stage for the Post WW-I Roar. As discussed above, World War I and its roaring aftermath returned the country to a free-market path – a path that led to the Great Depression, as Brandeis predicted.

While 1932 was a well-recognized swing toward progressive policies, the results in 1912 were equally stunning when one considers all the candidates running on some form of progressive platform. It took two decades for the progressive capitalist policies espoused by Brandeis to be put into action, but his efforts were central to the post-WWII political economy that became the Golden Age of Capitalism. The Reagan shift fifty years later is equal to the 1932 election. I have argued (as Stiglitz does) that the Clinton administration did not mark a shift away from neoliberal dominance in policy. The popular vote is consistent with this, although the electoral college victory was substantial. The Obama election, which I argue changes direction, was a substantial shift away from neoliberalism in both the popular and the electoral college votes. As a shift election, Trump's victory was very small, suggesting the reason that much of his mandate was carried out through executive branch action rather than legislation. The only big congressional action was a hallmark tax cut in the mold of Reagan and Bush.

This interpretation is clearly supported by outcomes in the elections for the House of Representatives (where all seats are up in every presidential election roughly in proportion to the population, unlike the Senate, where only a third of the seats are up and the number seats is set at two per state, bearing no relationship at all to the distribution of the population).[113] Wilson enjoyed a big pickup in 1912 and an equally big loss in 1916. Roosevelt enjoyed a huge 1932 victory. Democrats suffered a large loss in the Reagan victory. Clinton and Trump saw small changes in the House. Obama enjoyed a modest gain.

8. PROGRESSIVE CAPITALISM IN AMERICA: THE GREATEST HALF CENTURY THAT EVER WAS

In addition to the econometric analysis in Chapter 8, I want to emphasize the superiority of pragmatic, progressive capitalism by briefly noting a report released by the Cato Institute. The following text box is excerpted from a hill debate sponsored by the Cato Institute in November 2002.[114] It was early in the Bush administration and the Bush tax cuts were ongoing (2001, 2003). The first Bush recession had taken place and the Great Recession was just six years way. The California electricity meltdown had already taken place,[115] as had the dot-com bust.[116] There was some emerging concern about deregulation, and the Cato institute would soon change its view of electricity, arguing that the electricity grid was commons.[117]

The key points I made with respect to the analysis in this paper are summarized in Test Box 1. They include the following:

1) The key characteristic of progressive, democratic capitalism is the balance between public and private interest.

2) The five principles identified as affecting utilities are prominent in the work of Brandeis and Stiglitz.

3) My paper ends with an observation about the performance of the economy, made in the context of a challenge to the Cato interpretation. Cato had published a paper entitled "The Greatest Century That Ever Was: 25 Miraculous Trends of the Past 100 Years."[118] However, a close look at the data strongly suggest that the title should have been "Progressive Capitalism and the Greatest Half Century That Ever Was." The qualitative observation is identical to the Stiglitz claim cited in the introduction. This chapter offers first an examination of the Cato claim, adding a great deal of support for the superiority of progressive capitalism from the "simpler" data in the Cato analysis.

IT WAS ENTIRELY THE RESULT OF HALF A CENTURY OF PROGRESSIVE CAPITALISM: REINFORCING THE ECONOMETRIC EVIDENCE

Having shown that the econometric analysis strongly supports the conclusion that progressive capitalism is the superior economic model, I return to the Cato analysis of 1999. The following table (the only table in the document) highlights the flaw in the analysis. As shown in Table 8.1, it jumps from 1920 to 1995, ignoring the dramatic changes in the political economy between. Over half of the period between the two dates was progressive capitalism, while neoliberalism made up one-fifth of the period. The latter part of the Post-WWI Roar constituted one-sixth, and the crisis one-eleventh. The math alone suggests that most of the changes observed should be attributed to progressive capitalism. Moreover, as Table 8.5 shows, a dozen of the trends presented in the Cato analysis are sufficiently detailed to support a comparison between the economic models discussed in this paper.

TEXT BOX 1

"Restoring the Balance of Public Values and Private Incentives in American Capitalism," ***Too Much Deregulation or Not Enough,*** **Cato Institute Hill Briefing, November 1, 2002**

I frequently give a speech to CFA members in which I start with the bold statement that I am a devout capitalist, an evangelical preacher for capitalism. This almost always gets their attention, so I hasten to add that I am a member of a very specific sect of capitalist preachers – progressive, democratic capitalists. I believe that American capitalism dominated the 20th century because we found the right balance between private incentives and public responsibilities.

Balance is the key. In the 1990s irrational exuberance for deregulation destroyed the balance between the public and the private in a number of critical, infrastructure industries…

The case for deregulation is weakest in the utility industries because they are different from other sectors. They have unique economic characteristics and are affected by five public values. These can be found to some extent in other industries, but they play an important role in utility industries.

Public Infrastructure: Communications, transportation, and transmission facilities, available to all on a non-discriminatory basis, support highly complex and interconnected activities of our post-industrial economy. Adequate and open infrastructure creates great fluidity and opportunities (economists call them positive externalities to confuse people) that individuals and businesses cannot capture directly through private actions. Economists fret about a free-rider problem when people use a network without accounting for every jot and twiddle of costs, but it is just as likely that the network can be creating shared user benefits.

Public Resources: Certain resources, like pastures, fisheries, the air, water, and airwaves (the radio spectrum) occur 'freely' in nature. These generally need to be 'managed' to preserve their value, prevent overuse, etc. While they can be enclosed or privatized, sharing common resources may be more equitable and efficient from a societal point of view.

Public Participation and Cooperation: In the past half century, American capitalism has drawn Americans into deeper participation in the economic system by spreading the base of private ownership of publicly traded corporations far beyond anything that had previously been achieved by capitalist societies. This makes huge amounts of capital available for investment to support the ever-increasing scale and scope of modern enterprises. Perhaps even more importantly, this spread of ownership creates a personal commitment of employees to their enterprises. This is a critical ingredient for economic success in the information age, where human capital is the most important factor of production. Undermine the basis for this participation and you will starve our economic engine of financial and human capital.

Public Responsibility: Accountability and responsibility of management to the public is central to this modern enterprise. The financial darlings of the dot.com nineties – stock options and IPOs – were quintessential schemes to take the public's money and run. Once CEOs and entrepreneurs cashed in, responsibility for the continuing viability of the enterprise was weakened. It is hard to convince the public to invest in companies for the long term, when management will not.

Public Information and Knowledge: Thomas Jefferson wrote in 1813 – "Ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition." Today ideas circulate effortlessly on the Internet providing fuel for experimentation and creative thinking from unexpected and non-traditional sources. Pressures to patent and copyright everything for an eternity in cyberspace or build controls into hardware so that equipment dictates how information can be used threaten to destroy this open environment. This drains away resources from the next generation of inventions, creating a fear of infringement claims that chills creative endeavors and forecloses consumers as a source of innovation….

Take a look at the analysis published by the Cato Institute under the title *The Greatest Century that Ever Was: 25 Miraculous Trends of the Past 100 Years*. If one looks closely at the figures, the title should have been *The Greatest Half-Century That Ever Was: How the 50 Years After the New Deal Transformed America.* If one looks at improvements in public health, education, wealth and welfare, it was the half-century after the New Deal that made the twentieth century the American century.

If one insists that gains prior to the New Deal be recognized, I insist it was the antitrust laws and the trust busting of the early 20th century that prevented monopolization and cartelization from slowing our economy down. The current defense of unfettered monopoly capitalism, that is so popular under the guise of Schumpeterian theory, is simply inconsistent with the experience of the American century

TABLE 8.1: 25 WONDERFUL TRENDS OF 20TH CENTURY PROGRESSIVE CAPITALISM

Key	Trend	1900–20a	1995–9 8b	Cato Data	Model Data/ Othr
Output	Per capita GDP (1998 000 dollars)	4.8	31.5	Graphic	Econometric
	Resident U.S. population (millions)	76	265		Econometric
	Agricultural workers (percent of workforce)	35	2.5		Econometric
	Wheat price (per bushel in hours of work)	4.1	0.2	old	
Labor	Manufacturing wage (1998 dollars)	$3.40	12.5	No Trend	Econometric
	Length of workweek (hours)	50	35	No Trend	Econometric
					Econometric
Inequality	Poverty rate (percent of U.S. households)	40	13	Graphic	Econometric
	Black income (annual per capita, 1997 dollars)	$1,200	12400	Graphic	Appdx
Education	High school completion (percent of adults)	22	88	Graphic	Text
	Women's Bachelor's degrees (% of degrees)	34	55	Graphic	Text
Social	Life expectancy (years)	4.7	77	Not Trend	
Protection	Infant mortality (deaths per 1,000 live births)	100	7	Graphic	Text
	Infectious disease Deaths/100,000	700	50	Graphic	Appdx
	Heart disease (deaths/100,000 population)	307 (1950)	126	No Trend	
	Accidental deaths (per 100,000 population)	88	34	No Trend	
	Air pollution (lead, micrograms/100 cubic meters)	135 (1977)	4	Short	
Demand	Household assets (trillions of 1998 dollars)	$6 (1945)	41	Graphic	Appdx
	TV ownership (percent of U.S. households)	0	98	Graphic	
	Homeownership (percent of U.S. households)	46	66	Graphic	
Innovaton	Patents granted (000)	25	150	Graphic	Text
	Computer speed (millions of instructions/second)	0.02 (1976)	700	Graphic	Short
	Computer ownership (percent of U.S. households)	1 (1980)	44	Graphic	Short
Infrastructure	Electrification (percent of U.S. households)	8	99	Graphic	Text
	Telephone calls (annual per capita calls)	40	2300	Graphic	Appdx
	Cars for transportation (% of U.S. households)	1	91	Graphic	
	Air travel				Appdx
Workable	Finanacial				New Data
Market	Competition				Qualitative

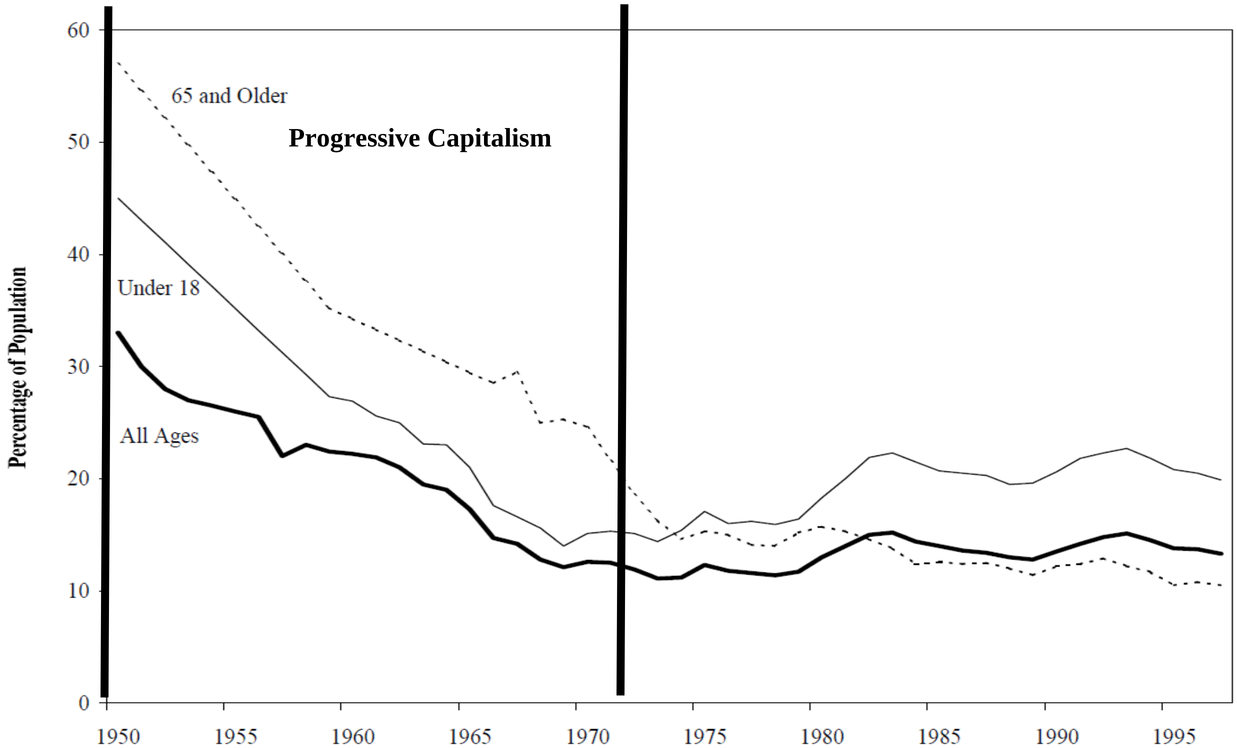
Source: Moore, Stephen and Julian L. Simon, 1999, *The Greatest Century That Ever Was25 Miraculous Trends of the Past 100 Years*, Cato Institute Policy Analysis, No 364, December 15.

The graphs also examine factors from the Stiglitz Model that were not covered by the econometric evidence (see Figure 8.1). I include one example only for factors with adequate trend data on a variable not already tested with econometric evidence. The appendix to this chapter includes additional evidence on several of the factors. The bulk of the progress was clearly made during the progressive capitalist period. The differences in trends across economic periods vary somewhat depending on the specific element, but there is overwhelming evidence that progressive capitalism performed better and was, at worst, equal to neoliberalism.

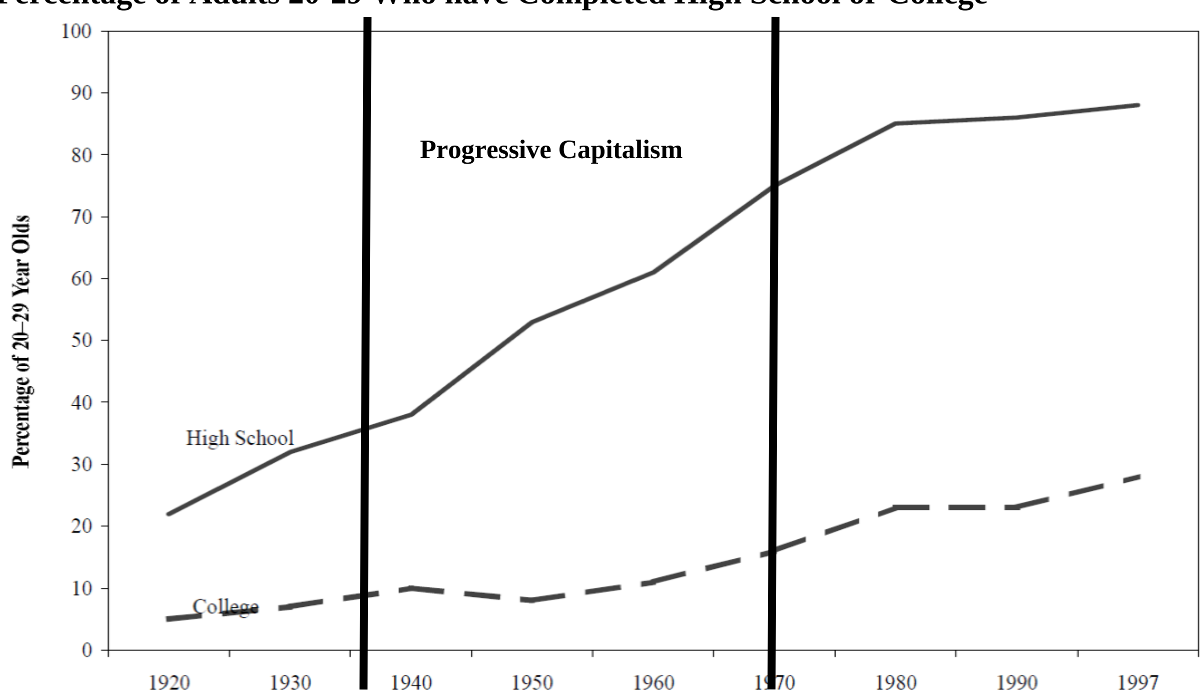
The graph on the poverty rate presents "perfect" data, with progress all but over by the end of progressive capitalism.[119] Much the same is true of education at the high school level, although the trend on college graduation is more uniform in these data. Infant and maternal mortality are also strongly supportive.[120]

FIGURE 8.1: INEQUALITY: ADDITIONAL GRAPHIC (CATO) EVIDENCE SUPPORTING THE BRANDEIS-STIGLITZ MODEL OF PROGRESSIVE CAPITALISM

Inequality
Percent Below Poverty Level

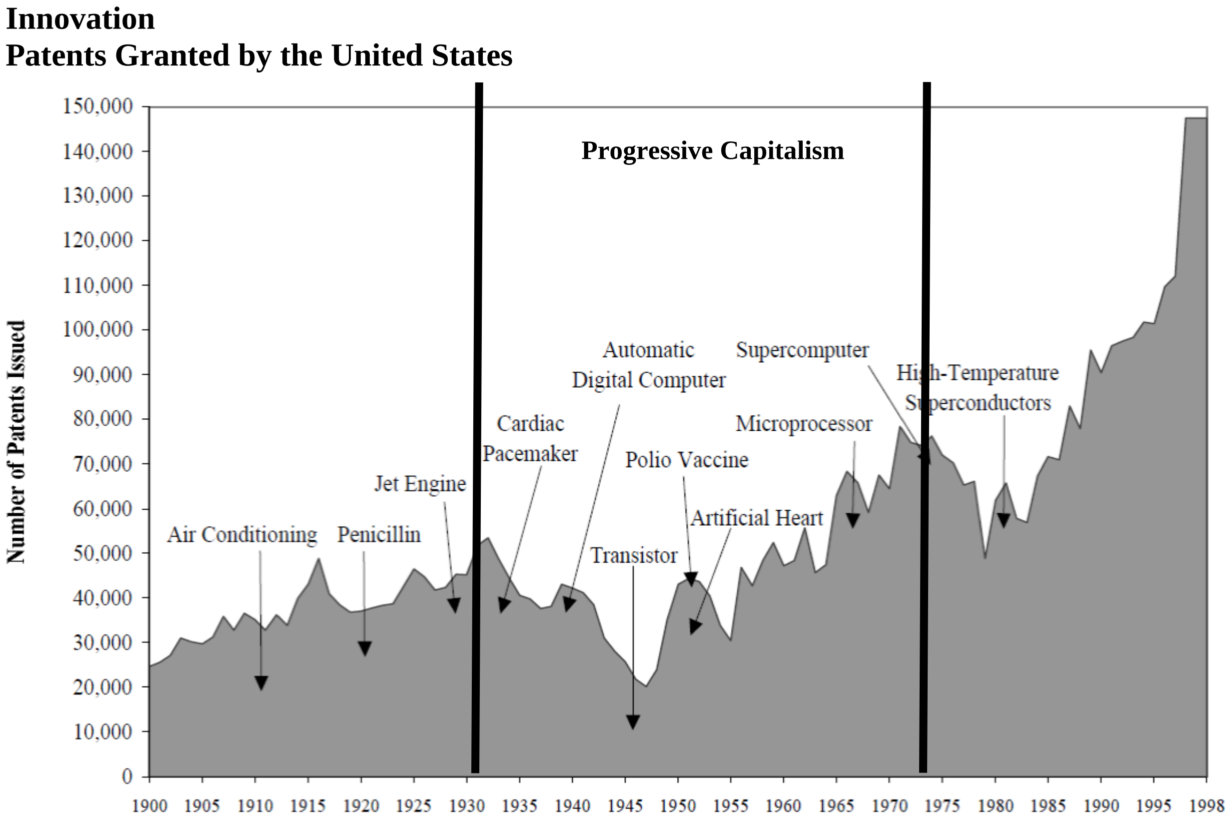


Education
Percentage of Adults 20-29 Who have Completed High School or College



Innovation measured by patents is interesting (see Figure 8.2). There is a remarkable absence of major innovations in the neoliberal period. There are two decades with no major technology identified by Cato. The dramatic run up in patents is not necessarily a positive trait of neoliberalism. Stiglitz and many others argue that the claim or patent has been used in excess and is detracting from innovation. This evidence is consistent with that argument.

FIGURE 8.2: INNOVATION



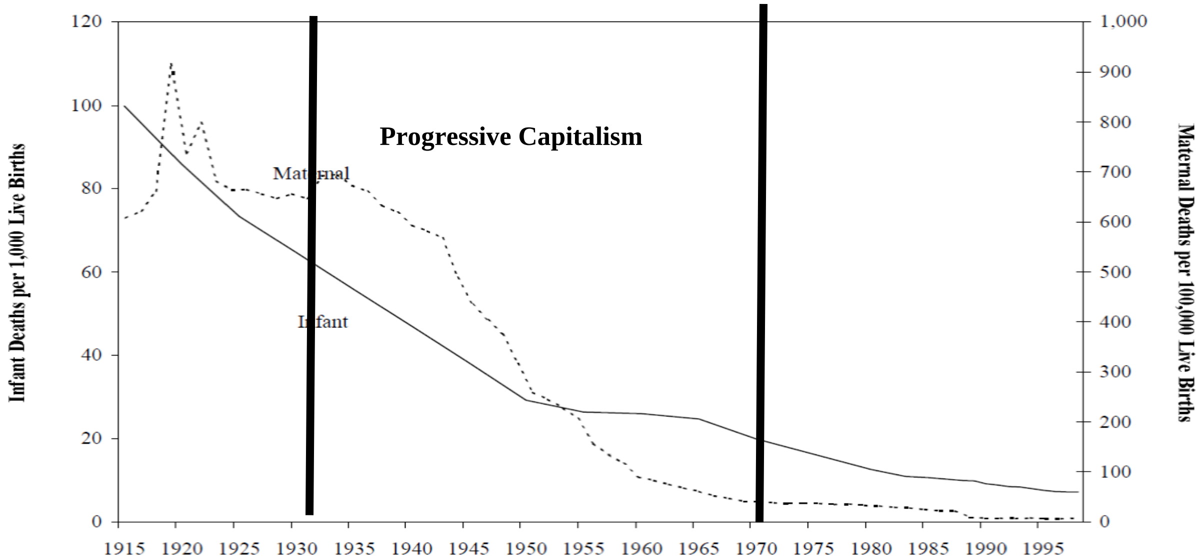
Where the element is a penetration rate (i.e., expressed as a percentage of households), there is an upper limit (see Figure 8.3). Progressive capitalism carried the element close to 100%, so there was little room for improvement (as in the electrification of residences).[121] Telephone penetration and many other household appliances follow a similar pattern, transforming America into a middle-class society, as Stiglitz argued.

EVIDENCE ON THE MISSING FACTORS: SOCIAL PROTECTION, INNOVATIONS, FINANCE AND COMPETITION

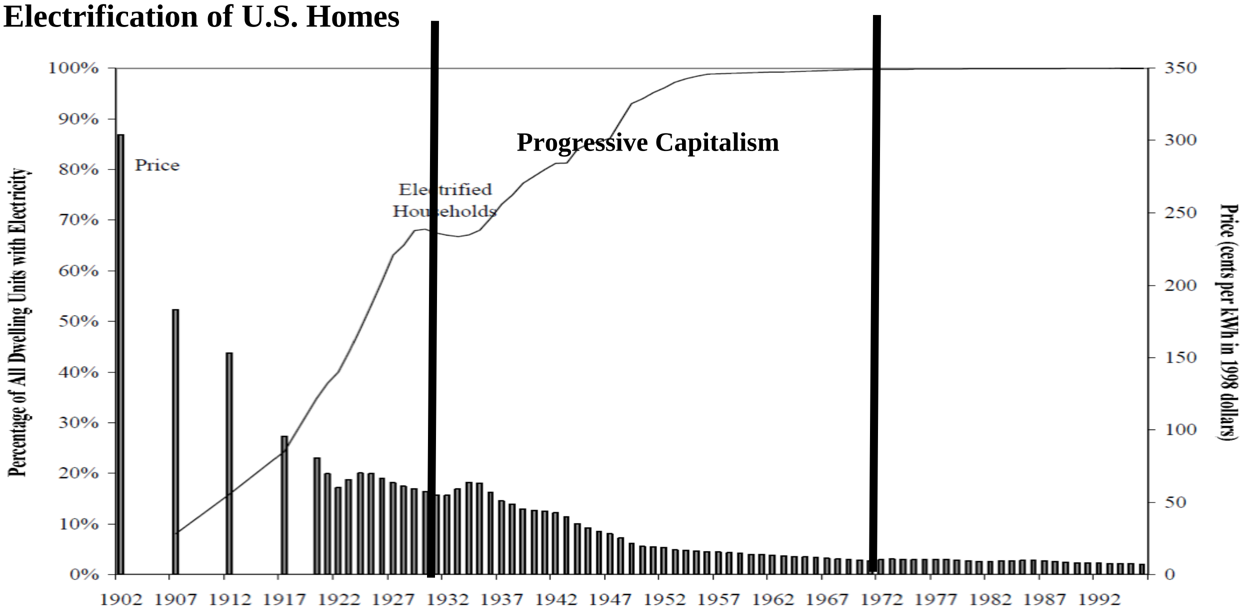
Combining the econometric and trend data leaves three gaps in the Stiglitz Model – trends after the Cato time horizon and data on competition and financialization. The Cato analysis did not and could not include the final decade of neoliberal dominance (the Bush presidency), but doing so would not change the conclusion that free market fundamentalism was a deficient approach in any way. If anything, it would strengthen the conclusions. As noted above, the Bush presidency was a very difficult economic period for neoliberalism, including a massive increase in inequality caused by the tax cut. Stiglitz's analysis of each of the factors makes it clear that the record of neoliberalism got worse, not better, in the decade from 1998 to 2005.

FIGURE 8.3: SOCIAL PROTECTION: ADDITIONAL GRAPHIC (CATO) EVIDENCE SUPPORTING THE BRANDEIS-STIGLITZ MODEL OF PROGRESSIVE CAPITALISM

Social Protection
Infant and Mother Mortality Rates



Infrastructure
Electrification of U.S. Homes



Between the econometric and graphic analyses, I have discussed ten of the twelve factors and measures of performance identified in the Stiglitz model. Examination of the other two factors – competition and financial institutions – not addressed by either data set reviewed here is also unlikely to change the conclusion. These are also areas that Stiglitz addressed at great length.

Financial Institutions

Banking and finance play a critically important role in the Brandeis-Stiglitz formulation of progressive capitalism. Brandeis and Stiglitz object to the harmful role of finance capital plays when the bankers move beyond their proper function in a capitalist society. When banks move beyond assessing lending risk and holding loans based on that risk, or take active participation in management, they are deeply afflicted by conflicts of interest and exceed their institutional capacity. The banks insist that they can handle the much more complex tasks from which they would like to profit, but the Great Depression and Great Recession indicate otherwise.

Both Brandeis and Stiglitz argue that the banking environment that prevailed in the 1920s and early 2000s was fraught with danger. They were not surprised by the harm to society when the untenable structure collapsed. A great deal of attention is focused on the profits of financiers and the fees on which those profits are based. These are certainly important, but given the underlying analysis, an even better indicator of the problem with finance gone astray can be found by measuring the extent to which banks engaged in intermediation. Intermediation went well beyond lending, with banks either taking a management position or shifting the risk to other parties (thereby abandoning their basic function of evaluating risk and being careful because their own money is at stake).

The upper graph in Figure 8.4 presents a careful analysis of the trend of intermediation, while the lower graph presents the share of finance in national income. These graphs tell the exact same story we observe in the other factors

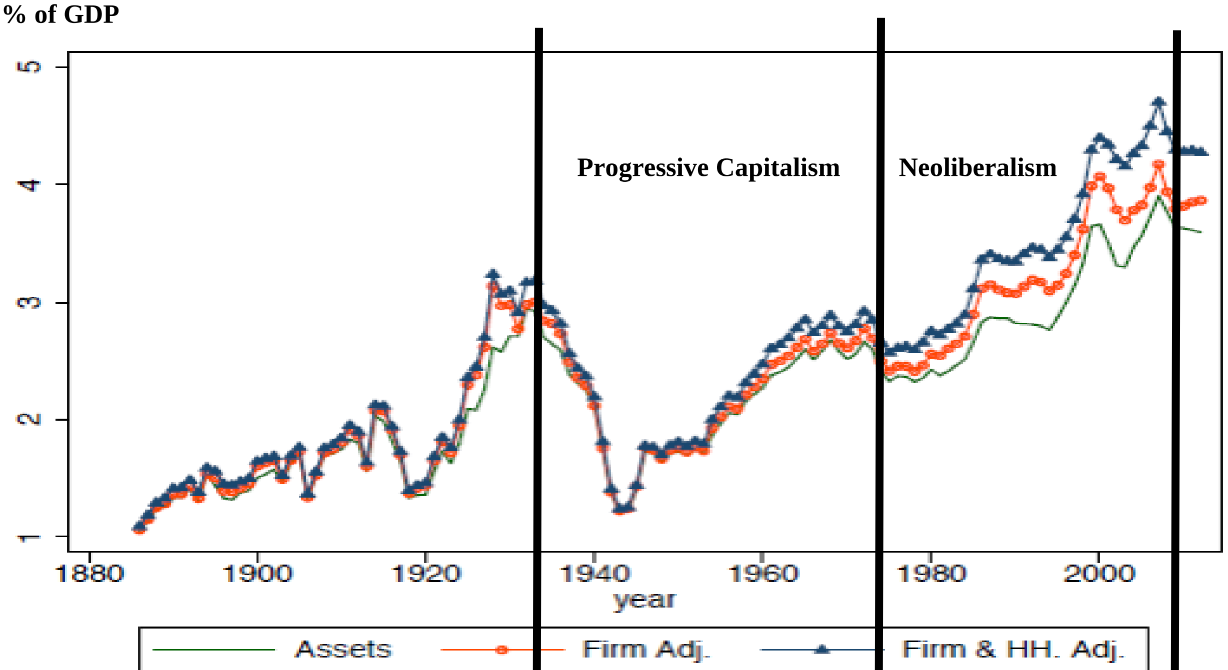
The Post-WWI Roar saw a rapid and massive run-up in intermediation and financial sector income, followed by the collapse into the Great Depression, which was not reversed by the New Deal. By World War II, the level of intermediation had fallen to that of 1920. The Golden Age of Capitalism saw a steady rise in intermediation and share of income, which Stiglitz notes as a cause for concern. Over about 30 years, both grew to almost the same level as the peak of the Post-WWI Roar. However, the rate of growth during the Post-WWI Roar was three times the growth during the progressive capitalist period. During the crisis period of the 1970s, intermediation growth slowed, but income did not. The period of neoliberal dominance witnessed a rapid rise of intermediation to unprecedented levels prior to the financial meltdown. The Great Recession witnessed declines in both intermediation and financial sector income, then saw stabilization.

Competition

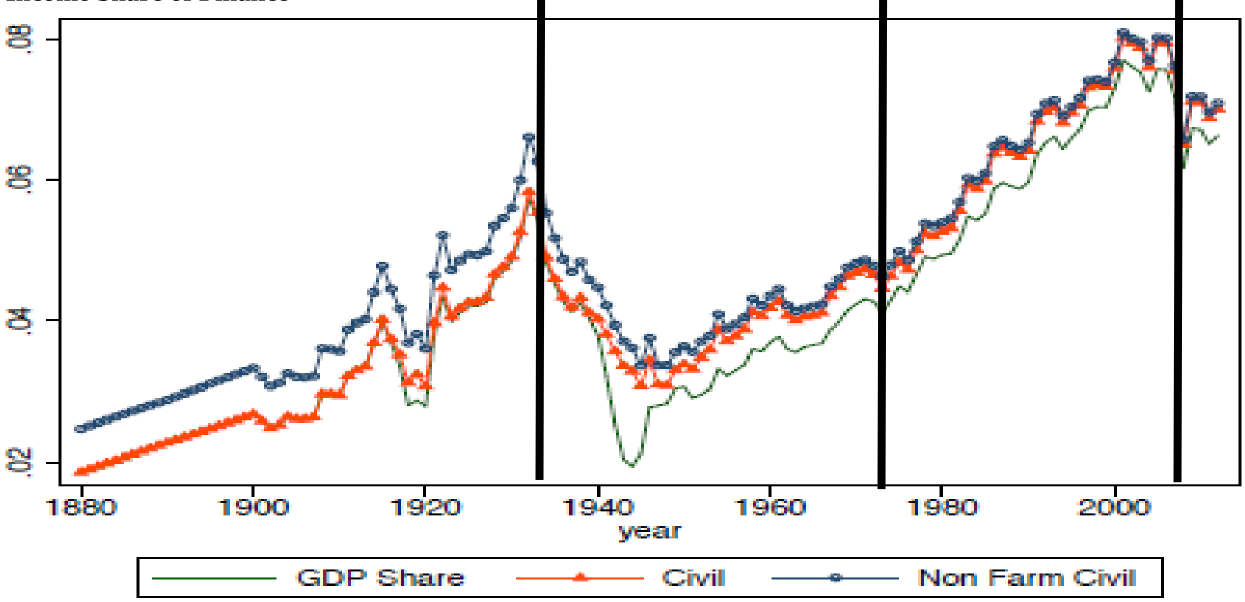
Competition is among the most intensely debated aspects of the war between political economies. Progressive capitalism argues that regulation and antitrust are necessary to ensure the role of competition. Neoliberals maintain that no such policies are necessary, but the empirical analysis indicates they are wrong. A capitalist economy with ineffective guardrails and little guidance will perform poorly on all the measures discussed above.

FIGURE 8.4: INDICTORS OF FINANCIAL SECTOR ACTIVITY

Quality Adjusted Intermediate Assets as % of GDP
% of GDP



Income Share of Finance



Thomas Philippon, Has the U.S. Finance Industry Become Less Efficient? On the Theory and Measurement of Financial Intermediation, September 2014

The empirical evidence that the neoliberal view is wrong is overwhelming. It began in the early 1980s with the rejection of "contestability," a claim that even the mere threat of competition was enough to discipline firms with aspirations of dominance, thereby preventing them from abusing market power. The key claims that a) horizontal concentration would not lead to abuse, and b) vertical integration was a great source of efficiency, have been tested hundreds of times and found to be unsupported.

An essential part of the problem with neoliberal analysis identified early on is that the assumptions about the market necessary to sustain neoliberals' claims are so extreme that they are never observed in reality. In theory, one could point to the conditions under which market power is not a concern. In practice, there are no markets that meet those conditions. An early literature review by Stephen Martin summarized the rejection of contestability along these lines.

Horizontal

(1) Contestability argued that a very small number of competitors, or even the mere threat of potential competition, prevents the abuse of market power. This logic fails because these small numbers of competitors are not enough to discipline market power in real markets,[122] and because the persistent formation of cartels contradicts the claim that they are difficult to form and swiftly eliminated by market forces.[123]
(2) Efficiency gains resulting from mergers are weak, while the incentive and ability to engage in anticompetitive, anti-consumer practices are strong in concentrated, integrated markets.[124]

Vertical

(3) The theory that a single monopoly can extract all the rent – which renders concerns about vertical integration moot – is inapplicable to virtually all real-world markets, where oligopoly is common and complementary markets are (or can be) much more competitive.[125]
(4) Vertical integration is a much larger problem than fundamentalists believe because there are many tactics that integrated entities can use to undermine competition.
(5) Well-known practices, like tying and bundling, deserve much more attention because they can impose harm on consumers under conditions that are more frequent than admitted.[126]

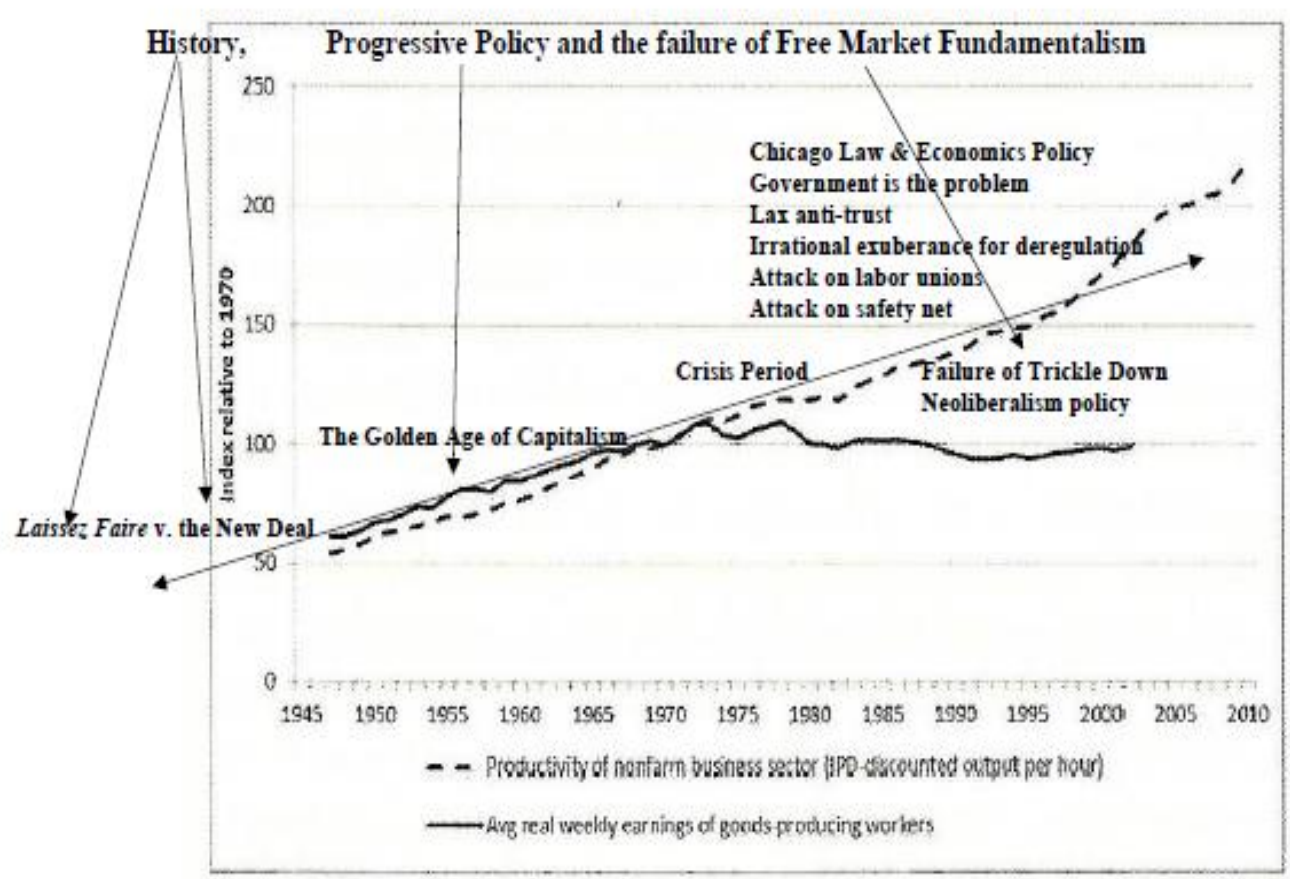
The conclusion to the empirical analysis is an ideal point to note that the economic theory and evidence on the superiority of progressive capitalism intersects with another powerful literature on competition, one which is very much data-based. Over the period in which the Nobel laureates discussed in Chapter 5 and others were disproving and rejecting the economic model underlying free market fundamentalism, antitrust scholars and practitioners were doing the same. Their critique parallels the rejection of in the economic literature.

Figure 8.5 presents a single graph, perhaps the best of all, that shows what free market fundamentalism is all about. It is from a 2012 book by Louis Zingales, a Chicago University economist who would later write the introduction to a major study that advocated aggressive (and hence, progressive) policy responses to the challenge of the new digital economy. The massive denial of the gains in production to the workers who produced them did not significantly change the growth trajectory. It simply transferred wealth. This pattern will be demonstrated for the comparison between Obama and Trump policies.

CONCLUSION

Based on the analysis in this chapter, we can conclude that the Brandeis-Stiglitz model of progressive capitalism is superior. The claim is that capitalism works very well (best by comparison to other real-world political economies) when it sustains **both** capital (e.g., profit linked to investment) and labor (e.g., productivity linked to wages). The manifestation of superior performance can be seen at the macro level in high economic growth, low unemployment, and reduced inequality. This balance is achieved primarily through the division of labor, with both capital and labor sharing the benefits, but also through socially determined redistribution of surplus because capitalism and markets tend to produce skewed distributions. However, the balance of redistribution is **not only** for social programs like social security, **but also** for advancing output. The strong entrepreneurial state **"helps" capital** (e.g., taking on high early risk projects, building infrastructure, creating and sustaining markets) **and labor** (e.g., education, skill training, housing).

FIGURE 8.5
MARK FUNDAMENTALISM: WEALTH TRANSFERS WITHOUT TRICKLE DOWN EFFECTS



Source: Luigi Zingales, *A Capitalism for the People: Recapturing the Lost Genius of American Prosperity* (Basic Books, 2012), Figure 1, p. 25

The balance can, of course, be seen as political – "fair" – as a basis for the legitimacy of the political economy. But it would be a huge mistake to see this political aspect as an afterthought. Policy is much more an engine of a successful political economy than it is a caboose. In fact, policy is the equal of the market, although its role changes over the lifecycle of the political economy. Over the course of two decades the Zingales's writing has shown a clear evolution. An earlier work, *Saving Capitalism From the Capitalists,*[127] emphasized the need for institutions to liberate private interests and create a level playing field for competition. After the Great Recession, Zingales reemphasized the role of public policy and cited two of the three works by Brandeis cited as major sources in Chapter 3.[128] In the introduction to the lengthy report of the Stigler group of antitrust experts discussed at great length in Part V, he describes a very broad regime of oversight (regulation and antitrust) for the digital economy. The only modification I would offer here is to the title of the first book. The objective is not only to save capitalism **from** the capitalists (whose natural tendency is to accumulate and abuse market power by undermining competition), but also to save capitalism **for** the capitalists (innovators) who are willing to act within the rules, accepting the guardrails and following the guidance of policy.

In the contemporary debate, as Stiglitz' complaint shows, the distinction is critical. While free market fundamentalism will fail, so too will socialism. "Too much" capitalism is as bad as "too little." Striking the balance is the great challenge confronting the digital revolution at its quarter-life crisis (critical juncture, turning point). Pragmatic, progressive policy to govern the capitalist economy is, once again, vitally necessary to create and sustain the conditions for market success, as the analysis of the contemporary digital economy in the next section shows.

PART V:
CHALLENGES AND RECOMMENDATIONS FOR GUARDRAILS AND GUIDANCE TO PRESERVE THE BENEFITS AND PREVENT AND THE ABUSES OF DIGITAL TECHNOLOGIES

9. THE NEW CHALLENGES OF THE ABUSE OF DIGITAL TECHNOLOGY

THE URGENT AND COMPLEX NEED FOR POLICY

The chapters in this conclusion first describe the challenges posed by the digital transformation of the economy and then offer policy recommendation, consistent with the remarkably successful and uniquely American model of pragmatic, progressive capitalism. Many governmental bodies, research institutions, and expert practitioners have concluded that digital technologies have proven their value, but there are also significant harms and abuses of that technology that diminish the current value and threat it future.

The goal of these chapters is not to regurgitate those analyses. Rather, it is to locate them in the framework developed throughout the paper and demonstrate that past approaches should provide the launchpad for future policy. The lessons of history are extremely important at this moment.

- The institutional structure needs both antitrust and regulation to ensure a stable basis for the new political economy.
- The pragmatic progressive approach ensures both political stability and economic expansion.
- The principles on which they rest are the same, but the practice must be adapted to the new techno-economic relationships in the economy.
- Antitrust and regulation need to be rebooted, after a long period in activity,
- Antitrust and regulation also need to be recalibrated to fit the new economy.
- Antitrust practice needs to be redefined to be better equipped for the challenges of the new economy,
- Regulation needs a new agency because, as good as the existing sector specific expert agencies have been, their portfolios and approaches are ill-suited to the task. A new agency designed for the digital sector is important to ensure flexibility and adaptability.

Simplistic solutions will not work. Insufficient regulation will allow abuses to continue and grow, ultimately undermining innovation and growth. Excessive regulation will compromise innovation and growth. The studies on which I rely in this part, are like pragmatic, progressive capitalism, very much in the middle between these two extremes. They reject both overly prescriptive mandates set in the stone of legislation (e.g. "utility-style regulation), and "unregulation" (e.g. irrational exuberance for deregulation). The goal of Part V is to explain why and how they arrive at this middle position.

About 6 months before the House Judiciary Committee hearing, mentioned in the first paragraph of this analysis, at which the CEOs of the largest digital platforms testified, a dozen antitrust practitioners and scholars filed a lengthy, heavily footnote laden letter as part of the record of the ongoing fact-finding hearings. Although they were narrowly focused on antitrust, that letter is a useful starting point to identify and address the challenges facing public policy at the quarter-life crisis of the 3rd industrial revolution.

They show clearly that antitrust faces a "double whammy" in responding to the crisis.

The first "whammy" reflects the fact that antitrust labored under a long period of increasing inactivity[129] under a theory that gave short shrift to real competition and consumer harm resulting from the absence of such competition by giving all the benefit of the doubt to large, and especially vertically integrated entities.[130]

This theory claimed that the harms of market power were small because powerful market forces prevented its abuse and there were substantial efficiencies to offset any harms.[131] The theory had been thoroughly discredited, but it was deeply entrenched in the courts, which were always a lagging institution when it came to economic transformation.

The "blame" laid at the door of the courts reflects the details of the long-standing criticism of free market fundamentalism, which can be summarized as follows:

- markets self-correct,
- large, monopoly units promote innovation,
- vertical integration creates efficiency,
- harms of market power are small (the single monopoly rent theory) and
- fleeting (undermined by ease of entry and the contestability of markets, which disciplines behavior without actual entry).
- potential competition has been overestimated (the mere possibility of entry, contestability, is enough so discipline the abuse of market power) and undervalued (actual potential competitors who are harmed by exclusionary tactics or face real and artificial barriers to entry are given little weight).
- evidence of anticompetitive intent is ignored.

These failures of free market fundamentalism are a clear theme of the chapters on Brandeis. The practical impact can be seen in Brandeis' vigorous support for the Sherman Act and his belief that it needed to be updated and strengthened legislatively, which happened twice during his life, with the Clayton Act (1914) and the Robinson Patman Act (1936). He was also concerned about democracy and participation, which have been the subject of considerable controversy in the antitrust community and tested the limits of antitrust practice.

The second, "whammy" stemmed from the fact that antitrust was confronted with a new set of economic characteristics of the digital economy that would have been a severe challenge for traditional antitrust, even if it had been functioning at its full potential.

> Platforms are often insulated from platform competition to a substantial extent by substantial scale economies in supply and demand (network effects) combined with customer switching costs.14 The financial markets appear to value many large platforms at levels reflecting an expectation that they will earn substantial rents from the exercise of market power for an extended period of time….
>
> Large online platforms often exist in winner-take-all and winner-take-most markets. In those markets, there are likely to be long periods where a firm has a monopoly or dominant position, which makes anticompetitive conduct more dangerous. Exclusionary conduct and mergers involving online platforms,

> particularly dominant ones, can harm competition among platforms and harm competition among users on platforms.
>
> Antitrust law and enforcement have failed to respond to growing market power in substantial part because many key antitrust precedents—particularly those precedents governing exclusionary conduct—rely on unsound economic theories or unsupported empirical claims about the competitive effects of certain practices.[132]

This was a second major theme of the Brandeis discussion in his support of significant regulation. The aspects of daily life that were undergoing transformation during the 2nd industrial revolution demanded oversight by agencies that delved into the details of the operation of the new economic units. He devoted a great deal of attention to labor relations, financial institutions, social protection, and health and safety, to name a few of the most important major categories identified in the 100 elements of the Brandeis Protocol.

This is not to suggest that traditional antitrust is unaware of the challenges. The digital platforms have attributes that are magnifications of those that have been challenging for the antitrust law and practice. The solution for Brandeis and the 2nd industrial revolution was pragmatism, flexibility and above all, dual jurisdiction. Both antitrust and regulation were necessary to provide the guardrail and guidance that capitalism needed. Brandeis also believed that broader policies were necessary, as well, including taxation, (voting) rights, personal freedom (privacy and speech). The importance and limitation of antitrust identified in Figure 2. 4, above, are particularly trenchant at the critical junctures in industrial revolutions.

The defense of antitrust offered by the experts in their letter launches from the observation that the growth of market concentration and the accumulation of market power that flows from it, constitute a failure of competition. This undermines the benefits associated with competitive markets including entrepreneurialism, productivity growth, innovation and fair treatment of labor. Market power leads to bad behavior. Consumers suffer from higher prices, lower quality and fewer choices. The supply-side is distorted by mergers and exclusionary tactics.

The challenge that regulatory institutions face is even greater, in a sense a "triple" whammy.

- Because they were defined by specific technologies and functions – e.g. telecommunications, commerce, their jurisdiction was questionable, likely to be challenged by dominant platforms.
- They, too had suffered through a long period of lax enforcement occasioned by the same "ersatz" competition theory.
- The new technologies and economic organizations posed new and severe challenges to their regulatory approach, even where they could assert jurisdiction.

One can well argue that legislation to create a new set of regulatory institution was needed more urgently in the regulatory space because products and the industrial structure of the digital economy had never had a clear regulatory authority.

This Chapter relies heavily on an analysis prepared by a broad range of analysts examining the challenge of the transformation brought on by digital technology.[133] As shown in Figure 9.1, (with the 100 elements identified in Table 3.1 above) the analysis could have launched from any one of a number of similar studies. Table 9,1 summarizes three such studies in by locating these research efforts in the broader, Brandeis Protocol.

TABLE 9.1: BIG TECH POLICY PROPOSAL VIEWED THROUGH THE BRANDEIS PROTOCOL

	Economic Fundamentals	A	B	C		**Political Fundamentals**	A	B	C
	Capital					**Democracy**			
1	Capital/Free markets	*	*	*	49	Democracy & competition	*	*	*
2	Fairness & equal opportunity	*	*	*	50	Civil Rights (Gender)	*	*	
3	Industrialization>Globalization	*	*	*	51	Education	*		
4	Inequality	*	*	*	52	Participation	*	*	*
5	Efficiency	*	*	*	53	Responsibility of Citizens	*	*	*
6	minimum scale, diseconomies		*	*	54	Unaccountable power	*	*	*
7	Competition	*	*	*	55	Speech	*		*
8	Yardstick competition		*		56	Privacy	*	*	*
9	Innovation	*	*	*	57	Law	*	*	*
10	Concentration/Trustbusing	*	*	*	58	the public interest, pub. Private Law	*	*	*
11	Vertical Integration	*	*	*	59	Lagging Law (common)		*	*
12	Collusion				60	due process	*	*	*
13	Unaccountable Power	*	*	*	61	Lawyers (Professionals)			
14	Intermediation (Big Banks)	*	*		62	Obligations of a Professions	*	*	
15	XS Financialization		*		64	Failure in Capture	*		
16	Conflict of Interest		*	*	66	Social Science	*	*	*
17	Denial of Access to Capital		*	*	68	Lagging Law	*		*
18	Access to information		*	*	69	Pragmatic Process	*	*	
19	Anticompetitive impacts:	*	*	*	70	Law & Reality	*	*	*
20	Excessive pay, fees charges	*			71	Facts (Brandeis Brief)		*	
21	Price, service	*	*	*	72	Flexibility (evolutionary)		*	
	Labor				73	Experimentation/Federalism	*		
28	Labor				74	Restraint & Responsibility		*	*
31	Unrest		*			**Regulated Competition**			
32	Unions				77	Institution building	*	*	*
40	Cooperation		*		78	Antitrust	*	*	*
45	Scientific Management	x	x	x	79	Sherman Act		*	
46	Cost Savings	x	x	x	80	new agencies (FTC)	*	*	
47	Social challenges	x			81	Regulation	*	*	*
48	Surplus	x	x		82	Authority, power & tools	*	*	*
					83	Uniqueness of war		*	
					84	Police power		*	
					87	Interstate Commerce		*	
					88	Economic	*		
					89	New & Expanding (Fed. Reserve, ICC)	*	*	*
					95	Health, safety	*	*	*
1					96	Investor Protection		*	*
2					97	Public Provision	*		

Sources A: *Stigler Committee on Digital Platforms,* September 2019., B: Shorenstein Center (Harvard) (Kimmelman, Wheeler, Verveer), C: UK Competition Authority, *Online Platforms and Digital Advertising Interim Report,* 2019

Some of the recommendations are focused on a subset of issues, while others are more broadly framed. Nevertheless, the two U.S. sources reviewed cover almost 60% of the elements. The elements not covered are either clustered in the labor category or belong to two other categories that cannot addressed by policies that seek to address market power and its impact – "isms" and public provisions. Thus, the three sources cover over three-quarters of the elements their targeted areas of analysis and policy recommendations. This suggests that their broad examination has created a strong framework for the further analysis of specific sectors in future papers in this series.

While those who were responsible for the antitrust analysis were part of the group that signed the antitrust letter, the Stigler document involved much more detailed analysis and covered issues not covered by the antitrust letter, including privacy, journalism and free speech. The result is a clear-eyed assessment of the interrelated goals of antitrust and regulation in the digital economy, focusing on big data-driven digital platforms. These are the firms (like Google, Facebook, and Amazon) that are attracting a great deal of attention because of their persistent dominance of key aspects of the digital economy (search, advertising, social media, transactions).

The Structure and Challenges of the Digital Revolution in Communications

The Stigler antitrust subgroup recognized the benefits (increase in surplus) of the digital revolution, but are not lulled into thinking there are no harms., highlighting why competition is not enough to guide the economy. The correct framing of the challenge is to preserve the benefits of the new economic paradigm while preventing or minimizing the harms. The core logic of the new dominant form of industrial organization must be respected, but the inclination of capitalists across all periods to exploit and abuse their market power in anti-competitive, anti-consumer, anti-social ways must be recognized and countered. The fundamental challenge is to design institutions that allow society to enjoy the benefits of economic progress, which relies on new economic entities, while minimizing the negative effects.

Table 9.2 (with issues framed in Table 5.1 and 5.2 above) identifies over a dozen characteristics of workably competitive markets offered in one of the most frequently used texts in the field of industrial organization, which relies on the structure-conduct-performance paradigm. The authors recognize that competition is never perfect, so "doubts concerning the competitive model's utility as a policy guide prompted a search for more operational measures of workable competition." They summarized a large literature on "the criteria of workability…divided into structural, conduct, and performance categories." Since structure and conduct criteria are often associated with performance outcomes, we allocate performance measures to structure or conduct criteria, where the overlap is very clear. The result is ten criteria. In the right-hand column, I summarize the characteristics of the big data digital platforms that suggest these markets are not likely to be workably competitive. The Stigler antitrust group's framing of these issues will be discussed below.

However, at the outset it is important to stress that the fact that antitrust and regulation have failed to prevent the harms in recent years is not a justification to abandon the benefits. The historically successful response to this challenge has been to do the opposite – to control harms without undermining the benefits. The moment has historically required a shift toward progressive policies, not a step backwards. Regulation by a strong entrepreneurial state is backed up by antitrust that seeks to protect competition where it is the more efficient policy tool. The triumph of market guidance in progressive capitalism explains why Marx was wrong and Brandeis would be very unlikely to make the same mistake. [134]

TABLE 9.2: BIG-DATA DIGITAL PLATFORM CHALLENGES TO WORKABLE COMPETITION

Scherer & Ross Workable Competition			**Stigler Antitrust Group**
Structure	Conduct	Performance	Big-Data Digital Platform
			Competition Challenges
The number of traders should be at least as large as scale economics permit.			**Minum Efficient Scale may be too lared to support vigorous competition**
		Profits should be at levels just sufficient to reward investment, efficiency, and innovation.	**Profits are excessive**
There should be no artificial inhibitions on mobility and entry.			**Pervasive natural barriers to entry result in tipping markets**
	There should be no unfair, exclusionary, predatory, or coercive tactics.		**Pervasice and much of it is beyond the reach of antitrust in a timely manner; a reguatory agency is necessary**
	Inefficient suppliers and customers should not be shielded permanently.	**Success should accrue to sellers who best serve consumer wants.**	**Potential entrant are excluded, extending the reach and lifespan of dominant firms**
There should be moderate price-sensitive quality differential in products offered.		**Firms' production and distribution operations should be efficient and not wasteful of resources.**	**Perverse incentive to increae quality undermines abiity to cmpete for low quality/prices customers, reduces choice and raises barrers to entry**
	Some uncertainty should exist in the minds of rivals as to whether price initiatives will be followed.	**Opportunities for introducing technologically superior new products and processes should be exploited.**	**Reduction in rivalry and elimination of potential entrants has reduced constraints on pricing and pressures to innovate.**
		Prices should encourage rational choice, guide markets toward equilibrium, and not intensify cyclical instability.	**Pricing refelcts maniputlation and exploitation under conditions of reduced rivaly**
	Output levels and product quality (i.e., variety, durability, safety, reliability, etc.) should be responsive to consumer demands.		**Bundling prcing and advertising structure demand an erstrict choice**
	Sales promotions should be informative, or at least not be misleading.	**Promotional expenses should not be excessive.**	**Advertising si excessive, manipulative and exploitative**
	Firms should strive to attain their goals independently, without collusion.		**Productsegmentation reduces rivalry**

The Stigler antitrust group adopts exactly the pragmatic approach highlighted throughout this paper. "Ideally, the goal is to steer technological advances to ensure widespread benefit without widespread harms—to protect and preserve innovation and advancement while minimizing the harms so that all of society reaps net benefits."[135] The underpinning of the analysis means their report "is offered in the spirit of ensuring a future of continued technological and economic progress and social well-being as we move forward in the digital age."[136]

Thus, they start from the recognition that "[e]very technological revolution comes with the potential to create unprecedented value," but also a need to address specific problems arising from the digital platforms' reach, scale, scope, and use of data.[137] Policy is necessary because "[b]enefits from innovative firms could be even greater and more equitably spread, ensuring that the public is not sort-changed in firms' pursuit of profit."[138]

The Stigler group's analysis also accepts the central proposition of this analysis, in that "[i]nsufficient competition and entry result in harms to investment and innovation."[139] In the digital age, innovation plays a much larger part compared to price than it played in the policy space of the 2nd Industrial Revolution.

> The harm from lack of competition in digital markets will manifest itself in quality and innovation, as well as from higher prices to advertisers…. the impact on consumer welfare of a decline in innovation due to lack of competition is likely to be large, especially in the case of fast-moving technologies that affect many consumers and related businesses.[140]

The Stigler antitrust group report recognizes that measuring the impact on innovation is difficult. However, effects of anticompetitive conduct or market structure that reduces entry are so important that the antitrust approach needs to "recalibrate" to give much greater weight to potential competition. Although "recalibration" may sound like a timid approach, as discussed below, the changes recommended are quite extensive, while remaining within the U.S. antitrust tradition.

The report also recognizes that antitrust addresses one issue area, "market structure and competition," while a different framework is needed to address other issues like "politics, media, and the nature of privacy."[141]

Digital platforms pose a unique challenge for competition and antitrust for a variety of reasons. Table 9.3 is constructed to highlight the tension in the analysis of the Stigler antitrust group, which mirrors the tension in the digital political economy. Here we have a litany of supply-side structural characteristics that explain concentration and market power, and an equally long litany of demand-side characteristics that explain the immense ability of the seller to exploit their market power. The irony is that many of the characteristics of digital markets that pose challenges to competition and antitrust are the source of the efficiency of the new form of industrial organization.

First, as shown in the upper left (Section A), the new form of organization that generates a great deal of surplus also tends toward high levels of concentration and barriers to entry.

These markets often have extremely strong economies of scale and scope due to low marginal costs and the returns to data. Moreover, they often are two-sided, have strong network externalities and are therefore prone to tipping. If so, the competitive process shifts from competition *in* the market to competition *for* the market. This combination of features means many digital markets feature large barriers to entry. The winner in these settings often has a large cost advantage from its scale of operations and a large benefit advantage from the scale of its data. An entrant cannot generally overcome these without either a similar installed base (network effects) or a similar scale (scale economies), both of which are difficult to obtain quickly and cost-effectively.

TABLE 9.3: CHALLENGES (MARKET IMPERFECTIONS) TO COMPETITION AND ANTITRUST FROM DOMINANT, BIG DATA DIGITAL PLATFORMS

A. Market characteristics increase surplus but weaken competition
- **(1) Average cost is too low**
- **(2) Quality costs are too high**
- **(3) Transaction costs are too low**
- **(4) Advertising costs are too low**
- **(5) Advertising value too effective for some**
- **(6) Increased output v. allocation of output**
- **(7) Direct network effects are too large**
- **(8) Indirect network effects are too large**
- **(9) Data is non-rivalrous and increasing in marginal values**
- **(10) Expansion costs (local and global) are too low**

B. Consumer behaviors that contribute to entry barriers abuse by dominant firms
- **(11) Inherent behavioral biases**
- **(12) Data is open to manipulation and exploitation**
- **(13) Machine learning is uniquely powerful**
- **(14) Lack of availability of Information to consumers**
- **(15) Failure to research and compare**
- **(16) Complex, opaque transactions**
- **(17) Consumer preference v. welfare (manipulation)**

C. Traditional conduct that reinforces market power

On the supply-side
- **(18) Limit openness and interoperability**
- **(19) Lack of transparency**
- **(20) Exclusion or degradation of services**
- **(21) Resist data portability**
- **(22) Behavioral economics used to exploit consumers**

On the demand-side
- **(23) Pricing (loyalty and to zero)**
- **(24) Contracts**
- **(25) Bundling**
- **(26) Lack of transparency**
- **(27) Increasing switching costs**
- **(28) Sunk costs/asymmetric information increase**

D. Policy that facilitates or fails to address market power

Lax antitrust enforcement
- **(29) Structure (mergers)**
- **(30) Conduct (fraud and abuse)**

Lack of regulatory authority
- **(31) Ineffective (privacy)**
- **(32) Absent (big data exploitation)**
- **(33) Severe challenge of assessing welfare**

Second, behavioral imperfections (Section B) which are highlighted in Tables xx. And xx) above, that have been recognized for several decades make these markets very vulnerable to the accumulation and abuse of market power by dominant firms.

> Additional barriers to entry are, ironically, generated by the very consumers who are harmed by them… In general, the findings from the behavioral economics literature demonstrate an under-recognized market power held by incumbent digital platforms.

> The role of data in digital sectors is critical. Personal data of all types allows for targeted advertising to consumers, a common revenue model for platforms. The report shows that the returns to more dimensions and types of data may be increasing, which again advantages incumbents. Consumer data in the United States is not regulated in any way that gives useful control or privacy to consumers, and additionally, most consumers have little idea what is being collected about them and re-sold. One way in which digital platforms often exploit their market power – and increase their profits – is by requiring consumers to agree to terms and conditions that are unclear, difficult to understand, and constantly changing, but which give the platform freedom to monetize consumers' personal data.[142]

The behavioral economics present a different, and in some ways greater, challenge to traditional antitrust.

> Behavioral economics magnifies the anticompetitive potential and harm of platforms. Consumer biases are vulnerable to big data and competition is not the solution, since the marketplace – demands exploitation for competitive survival because "staying profitable in a competitive environment may force firms to exploit behavioral biases to achieve maximal profitability. Firms abstaining from doing so may be driven out of the market... rais[ing] broader consumer protection concerns that cannot be solved through greater competition. (36)

Behavioral economics challenge the fundamental assumptions about consumer behavior and call into question the antitrust enterprise, which seeks to clear away the supply-side market imperfections that are believed to frustrate the actions of welfare-maximizing, well-informed, effective, demand-side decision makers. If the motivations, capabilities, and tools used by consumers do not operate as the market paradigm assumed, the outcome will not be as expected, even if supply-side imperfections have been reduced or eliminated. The neoclassical view and antitrust were criticized for this failure long before big data platforms made matters much worse.

Dominant firms will "convince" consumers to stay put and prevent competitors from being able to convince them to move.

> Moreover, unlike traditional markets, where several quality layers may coexist at different price levels (provided that some consumers favor lower quality at low prices) markets were goods are free will be dominated by the best quality firms and others may compete only in so far as they can differentiate their offers and target different consumers. This strengthens the firm's incentive to increase quality through increasing fixed costs in order to attract customers (the Sutton sunk cost effect) and further pushes the market toward a concentrated market structure. (31)

Under alternative assumptions about consumers, who cannot be assumed to be perfectly rational, welfare-maximizing, knowledgeable, information-using actors, producers have the ability to manipulate consumers by studying and exploiting inherent biases in consumer action. Big data magnifies this potential exploitation and abuse by enabling those selling goods and services to gather data and analyze consumer weaknesses at an unprecedented level and depth. They do not just meet consumer needs; they create and exploit them. Consumer defenses, already weakened, are overwhelmed.

Thus, the Stigler antitrust group identifies a number of practices that can lock in consumers, raising barriers to entry and reducing competition.

> One way in which digital platforms often exploit their market power – and increase their profit – is by requiring consumers to agree to terms and conditions that are unclear, difficult to understand, and constantly changing, but which give the platform freedom to monetize consumers' personal data.
>
> Maintain complete control over the user relationship… can be used to reduce the possibility of successful entry by direct competitor. Exclusive contracts, bundling, technical incompatibilities.[143]

After explaining how these factors create challenges for antitrust, the document devotes its attention to seeking solutions. It begins with antitrust, but ends by acknowledging a sector-specific regulator will be necessary.

> However, because technology platforms present the enforcement challenges detailed above, even effective enforcement may not be enough to generate competitive digital markets in a timely fashion. Therefore, the report suggests that Congress create a specialist regulator, the Digital Authority. The regulator would be tasked with creating general conditions conducive to competition.[144]

If we conduct the intellectual exercise of assuming all problems in the right column of Table 9.3 are solved, then ask ourselves the following basic antitrust question, we come up with a surprising answer. Having eliminated the producer conducts that reinforce or exploit market power, could we leave the sector alone and let the big platforms do their thing? The answer is no, just as it was for the big communications corporations a century ago. The inherent tendency of capitalists in the sector – who are pursuing its efficiencies – is to concentrate and integrate. This creates huge barriers to entry and a dramatic reduction in competition. Without competition, innovation slows and the dominant firms collect rents from consumers.

> There is no tooth fairy; advertising supported services are not free. There are costs. Consumers pay with a reduction in their privacy and in the price of the goods that are advertised and the weakening if not elimination of competition, which reduces innovation and lowers quality. (33)

The right side of Table 9.2 identifies upwards of a dozen more "traditional" antitrust concerns that the Stigler antitrust groups find operating in big data digital platforms. This is not to say that traditional antitrust was incapable of easily dealing with these types of action. However, under the influence of free market fundamentalism, lax antitrust enforcement did not try very hard to prevent these abuses. In fact, the broad critique of free market fundamentalist antitrust identified and demonstrated many mistakes that have been made. Antitrust practice had already *Overshot the Mark.* [145] I argue that, in fact, they had totally missed the mark long before the new form of industrial organization had moved market reality even farther from the underlying assumptions – not only of free market fundamentalism, but also of a more reasonable view of market operation and performance. With well over a dozen severe challenges to traditional antitrust identified, the existence and importance of the more traditional substance of antitrust is magnified

Table 9.4 uses the issues identified in Table 9.3 to locate the analysis of Tim Wu's book on The *Curse of Bigness,* As shown in chapters 3 and 4 the original book is an important aspect of the Brandies Protocol, but is one aspect. Table 9.4 underscore the fact that, a careful reading of Brandeis must recognize the complexity of the overall analysis. Wu is sensitive to this need in three important ways.

First, he begins from an appreciation of the "big cases" under the Sherman Act. This is certainly the view of Brandeis, too.

Second, he underscores the shortcomings of the act both in how it was vulnerable to abuse by market fundamentalists and how it must be powered up to deal with digital technology. Again, Brandeis understood the limitations of the Sherman Act and worked hard to improve it.

Third, Wu recognizes that there is a great deal of other policy necessary. While he declares those beyond the scope of the short treatise in *The Curse of Bigness,* I find about three-dozen references to policies or issues that merit further attention. These fit within the Brandeis-Stiglitz framework for progressive capitalism that I have outlined above.

Simply put, as shown throughout this paper, *The Curse of Bigness* is an important part – perhaps even the start – of the conversation among progressives, but it is certainly not the end. Regulation and other policies (e.g., taxation, social protection, innovation, etc.) are just as, if not more, important in building a pragmatic, progressive political economy that, according to Stiglitz and Brandeis, must be based on decentralized competition and markets.

THE DILEMMA OF ECONOMIC TRANSFORMATION IS INTENSE AND OBVIOUS

One the one hand, there are immense benefits flowing from a technological revolution – efficiencies and potential growth that parallel the starting point of the Brandeis-Stiglitz framework.

> One of the key defining factors of the past decade is the rise of Digital Platforms (DPs), such as Google, Facebook, Amazon, Apple. As more and more of our economy and society moved online, these companies ascended from non-existent or nearly bankrupt in the early 2000s to join Microsoft as global behemoths, exceeding (as of August 2019) more than 4 trillion dollars in market capitalization.
>
> This meteoric rise is not surprising. These companies invented new products and services that revolutionized the way we work, study, travel, communicate, shop, and even date. In the process, they created trillions of dollars in consumer surplus.

On the other hand, new technology and the benefits it delivers does not excuse anticompetitive practices or the abuse of market power that causes harm to the public, which was the central concern of Brandeis and Stiglitz.

TABLE 9.4: CHALLENGES OF NEW TECHNOLOGY

STIGLER GROUP ON ANTITRUST AND REGULATION | **TIM WU (*CURSE OF BIGNESS*, Pg. #)**

Market Characteristics that increase surplus but weaken competition

(1) Average cost is too low
(2) Quality costs are too high
(3) Transaction costs are too low
(4) Advertising costs are too low
(5) Advertising value (targeting) with large databases is too effective (for some/many)
(6) Consumer preference v. consumer welfare
(7) Increased output v. allocation of output
(8) Direct network effect value for communications consumers is too
(9) Indirect network effect value to producers of complements are too large
(10) Local/global expansion costs are too low

Antitrust Reform	Economic Issues
128	15, 119,
129	120,123
134	124, 125

Traditional conduct that reinforces market power

On the supply-side
(11) Limit openness and interoperability
(12) Lack of transparency
(13) Exclusion or degradation of services
(14) Resist data portability
(15) Consumer exploited by behavioral economics
(16) Complex, opaque transactions
On the demand-side
(17) Pricing (loyalty and to zero)
(18) Contracts
(19) bundling
(20) Lack of transparency
(21) Increasing switching costs
(22) Magnifying switching cost through sunk costs and asymmetric information

Antitrust Reform	Economic Issues
	119

Consumer behaviors that contributes to entry barriers abuse by dominant firms

(23) Inherent behavioral biases
(24) Data is open to manipulation & exploitation
(25) Manipulation of Consumer preference v. welfare
(26) Machine learning is uniquely powerful
(27) Lack of availability of Information
(28) Failure to research and compare

Antitrust Reform	Economic Issues
128, 135	112,120
137	123,125

Policy that facilitates or fails to address market power

Lax antitrust enforcement
(29) Structure (mergers)
(30) Conduct (fraud and abuse) Lack of regulatory authority
(31) Ineffective (privacy)
(32) Absent (big data exploitation)
(23) Severe challenge of assessing consumer welfare
(34) Political impact of weak antitrust & absence of regulation

Antitrust Reform	Economic Issues
16,17,18,	123, 132
32, 40,41,	133, 139
42, 72	
123, 125	
128, 130,	

Nonetheless, recognizing the enormous gains brought about by these companies to date does not equate to saying that: (i) these gains will endure, especially if markets are no longer competitive; and (ii) there is no room for welfare gains by reducing some of the downsides brought about by them. However, it is critically important to recognize that there are clear differences in the existence and abuse of market power across companies and markets that require nuanced responses to preserved the benefits.

> The term "Digital Platform" lacks a consistent definition—different companies may be characterized as a platform in different environments. For example, Google, Facebook, Amazon, Apple, and Microsoft raise different concerns regarding how their "bottleneck power" impacts the markets in which they operate. Considerations on market power involve all five companies mentioned above.

The challenge changes because of the nature of the technology, but the principles of competition and consumer protection do not. Institutions that worked well to achieve the economic, social and political goals in pursuit of these goals need to be updated, but not abandoned. The Stigler paper advocated, responses that were "least intrusive."

> This *Policy Brief*, aimed at a non-specialized audience, summarizes the main concerns identified by these studies and provides a viable path forward to address the identified concerns.[5] It tries to do so in the least intrusive way possible.

From the point of view of this analysis and the ongoing debate over how to shape the political economy, the phrase "least intrusive" is acceptable, as long as it is subject to key conditions. It is certainly consistent with the notion of preserving decentralized competition and markets. However, the policy response must not sacrifice effectiveness in service of the objective of "least." This applies to both horns of the dilemma. It needs to be intrusive enough to get the job done, but not so intrusive as to undermine the dynamic growth of the economy. Therein lies the rub, the need to balance guardrails and guidance that sets the goals and orients the market, while letting the market operate to the greatest extent possible in pursuit of those goals. With these caveats, this part will rely heavily on the Stigler paper.

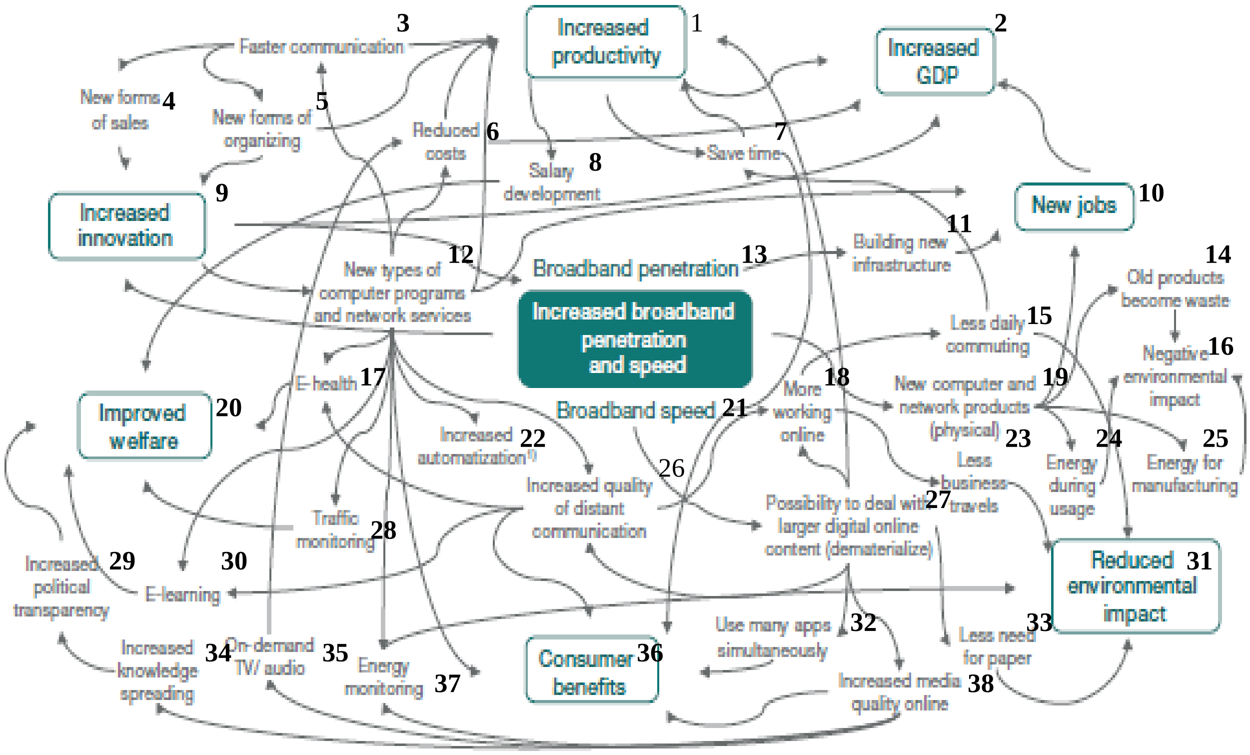
The dramatic shift of activity online reflects the value that consumers derive from the new services that digital technologies deliver. Underlying this change in consumer behavior is a fundamental transformation of economic activity. In the early days of the digital revolution, some questions were raised about the benefit of the massive investment in the technology in the form of a "computer paradox."[146] Three decades later, there is no doubt that the economy has been transformed and growth has been stimulated by the digital revolution.

It is difficult to convey how comprehensive the changes have been, but a study by Ericsson, Arthur D. Little, and Chalmers University offered the schematic in Figure 9.1 to try to capture the pervasiveness of the process. Across the top half of the graph we see the benefits that accrue to the broad economy as the penetration and speed of broadband Internet access and use advances. Across the bottom half of the graph we see the individual-level benefits.

FIGURE 9.1: IDENTIFYING THE IMPACT OF THE DIGITAL REVOLUTION

Effects of the Deployment and Adoption of Digital and Broadband Technologies

MACROECONOMIC LEVEL BENEFITS



As complicated as the chart is, the text cautions that "this map is a simplification—in reality there are even more factors and linkages."[147] Be that as it may, this is what a technological revolution looks like when a general purpose technology is driving a new economic paradigm at the center of an emerging mode of production. The effect of this technological revolution has been felt across all factors of production, and not only in production costs but also in lowering transaction costs. Technological progress under the assumption of increasing returns to scale is broadly defined as new knowledge innovation, public infrastructure, among other things. The effect of technology is magnified when the latter includes technology that supports communication, enhances productivity, and improves the wellbeing of the society. In this regard, development in technology is expected to lower the cost of production, streamline supply chain processes, provide access to information in decision making, and support consumers in acquiring quality products at competitive prices.

The Table 9.5 shows how the technological revolution affects the political economy as conceptualized in chapter 5. The major categories of performance are identified as key outcomes in large text and boxes. The 38 specific elements can be readily assigned to the key functions and processes.

In this regard, development in technology is expected to lower the cost of production, streamline supply chain processes, provide access to information in decision making, and support consumers in acquiring quality products at competitive prices. However, as we have seen, technological change is not a guarantee against the accumulation and abuse of market power. While the beneficial effects of the digital revolution have been demonstrated at the level of geographic areas (nations, regions), industrial units (sectors, industries and firms), as well as improvements in consumer welfare.

TABLE 9.5: INDIVIDUAL-LEVEL BENEFITS

The Impact of Digital/Broadband in the Stiglitz Model

KEY FACTORS — **KEY PROCESSES** — **MEASURES OF PERFORMANCE**

Voting &
civic involvement **7,26,29,38**

Equality **7,15, 18**

PRODUCTIVITY[1]

Education **30**

OPPORTUNITY
& PARTICIPATION

Employment **10,17,18,20,36**
& Social Protection*

INVESTMENT WAGES[8] GDP GROWTH[2]

Competition **4,32**

WORKABLE MARKET
FUNCTIONING

3,5,6,12, 17,26

PROFIT[6]

Finance capital **11**

Infrastructure **9,12,19**

INNOVATION

Technology **34**

CHALLENGES

Knowledge & Science

Systems[4,5,18,22]
Industrialization[18,22]
Globalization[23,26,31]

Sources: Upper: Ericsson, Arthur D. Little, and Chalmers University, *Socioeconomic Effects of Broadband Speed*, September 2013. A much simpler version that conveys the same message can be found in International Telecommunications Union, *Impact of Broadband on the Economy*, April 2012, p. 3, Lower see Figure 3.1.

I present this graph and document the benefits in the citations, not to preclude the adoption of those policies, but to underscore the fact that the policies must be carefully thought out and implemented. Because the benefits are so large, overly simplistic policies that essentially ban activities can impose large costs (losses) on society. Pragmatic, progressive market policies have worked in past and can work in the future to improve the performance of the emerging political economy, but they must be nuanced, pragmatic and progressive.

The magnification of the impact of communications infrastructure comes about because of its pervasive effect across all economic and social activity and its ability to transform a wide range of relations of production. The social returns to investment in communications infrastructure are very high, a positive externality, and sectors where they have a large impact, e.g., government services, education, health, and energy, are themselves public goods, or exhibit significant characteristics of public goods. Moreover, because of the ability of broadband to compress space and time, areas and people who are more isolated can benefit disproportionately from the spread of the technology. During the formulation of the National Broadband Plan, it was made clear that broadband communications services play a vital role in the overall U.S. economy.[148]

While broadband receives a great deal of attention in the analysis of macro and micro economic impacts of new technology, wireless communications have the same effect. As the Department of Justice explained in its opposition to the ATT/T-Mobile merger,[149]

However, as we have seen, technological change is not a guarantee against the accumulation and abuse of market power. It is the central premise of this analysis that careful policy can preserve the benefits while controlling or eliminating the abuses.

10. ANTITRUST AND REGULATION FOR THE DIGITAL AGE

COMPLEXITY, CHALLENGES AND CORE PRINCIPLES

This Chapter describes the principles that should guide the rebooting and recalibration of antitrust and regulation to respond to the challenges posed by the digital revolution. It focuses on the big, digital platforms that have become bottleneck firms that dominate a new choke point in the digital communications sector. In a separate paper I have analyzed the challenge of the big broadband networks that were an obstacle to the development of digital communications in the birth and initial deployment of the Internet.

The policy principles that I have shown were successfully applied in that earlier period are the same as the principles needed today to prevent both the big data platforms and big broadband networks from strangling and distorting the development of the digital communications sector. Indeed, they are the same principles applied to ensure the success of the 2nd industrial revolution in America at the same point in its development over a century ago. Of course, the details of the policy change with the technology, but its principles (outlined in Chapters 3-6) are the same. The Brandeis-Stiglitz model of pragmatic, progressive capitalism meets the challenge, by doing the following:

- It seeks to construct guardrails and guidance to promote competition and innovation in decentralized markets, and
- orient capitalism in a direction that promotes and furthers the fundamental economic, social and political values of society,
- while ensuring consumer benefits and providing consumer protection.
- The process must be pragmatic and flexible to accommodate the dynamic economy, based on analysis of the real-world functioning and impact of each sector.
- It should be implemented by experts who have not only the skill, but the authority and resources to implement policy to pursue the goals.
- Political developments should be democratic and participatory, endeavoring to have political development support evolving economic structure.

The Stigler group provides crucial analysis with its very comprehensive examination of issues. The Stigler group's approach is pure Brandeis, as described in Chapters 3 and 4 above.

- It launches from a detailed economic analysis as it affects antitrust,
- endeavoring to make competition and markets work better.
- It examines the single largest social issue and economic issue arising in the digital age— privacy and the use of data—and
- discusses one of the most important mainstays of the democratic political economy (journalism), as well as the broader impact of digital technology on democracy.

- It seeks policies that set clear goals, identify the most important issues, and remove barriers to effective implementation, but it relies on the practice of experts to identify how to implement specific policies to achieve those goals.

Given the focus of this paper on the intersection of the political and economic elements of the model, Table 10.1 uses the issues identified by the Stigler group (shown in the left-hand column), to organize the discussion of policy responses shown in the two right hand columns. This underscores the need for a complex approach to the oversight of the revolution wrought by digital technology. The objective of this analysis it to identify the broad reforms required to build the institution needed in the digital age. Many of the details will be worked out through antitrust and regulatory practice. Throughout this analysis I will emphasize the agreement between the major U.S. institutions and their grounding in the long-standing American model of pragmatic, progressive capitalism.

The left column identifies the changes in antitrust that the group deemed necessary. It establishes changes in law and practice. The right column identifies the authorities and issues that constitute the portfolio of the new regulatory agency. Here, legislation is necessary. There will be a debate over where the legislation should draw bright lines and where agency practice should be developed.

The Stigler group recommendations for antitrust reform call for a "recalibration" practice. "Recalibration" may sound like a timid response, but there are a number of ways in which it is profound. In addition to the major changes identified above, the Stigler antitrust group will also let a new regulatory agency handle many issues that would frustrate antitrust. "It is time for antitrust law to recalibrate the balance it strikes between the risks of false positives and false negatives." This is the pattern I have pointed out in the New Deal as the launchpad for the Golden Age of Capitalism. Antitrust law was not substantially amended, but enforcement was ramped up dramatically while over a dozen other policies were adopted and new regulatory agencies created.

At the same time, the Stigler group's recommendations reflect a belief in the overall success of the Sherman Act approach and its flexibility to deal with economic changes. They tie this to the link to common law, an issue that I noted earlier. The Stigler antitrust group notes that the preference for legislation over practical evolution is a close call. The significance of the proposed recalibration can be appreciated from another perspective. As the Stigler antitrust group points out,

> With few exceptions, antitrust law has in the past evolved in a common-law-like process by which it has reflected new learning and judicial and market experience. This process is continuing, at least to some extent, as antitrust law and enforcement have recognized, for example, previously unnoticed competition problems in labor markets and doctrine has evolved to incorporate new learning about competitive problems that can be created by most favored nation (MFN) and other vertical agreements. The challenges posed by the big technology platforms and the current populist political climate have, however, put the issue of antitrust reform before Congress in various legislative proposals. There are advantages and disadvantages to both common law evolution and new legislation.

Evolution by a common law-like process takes time.

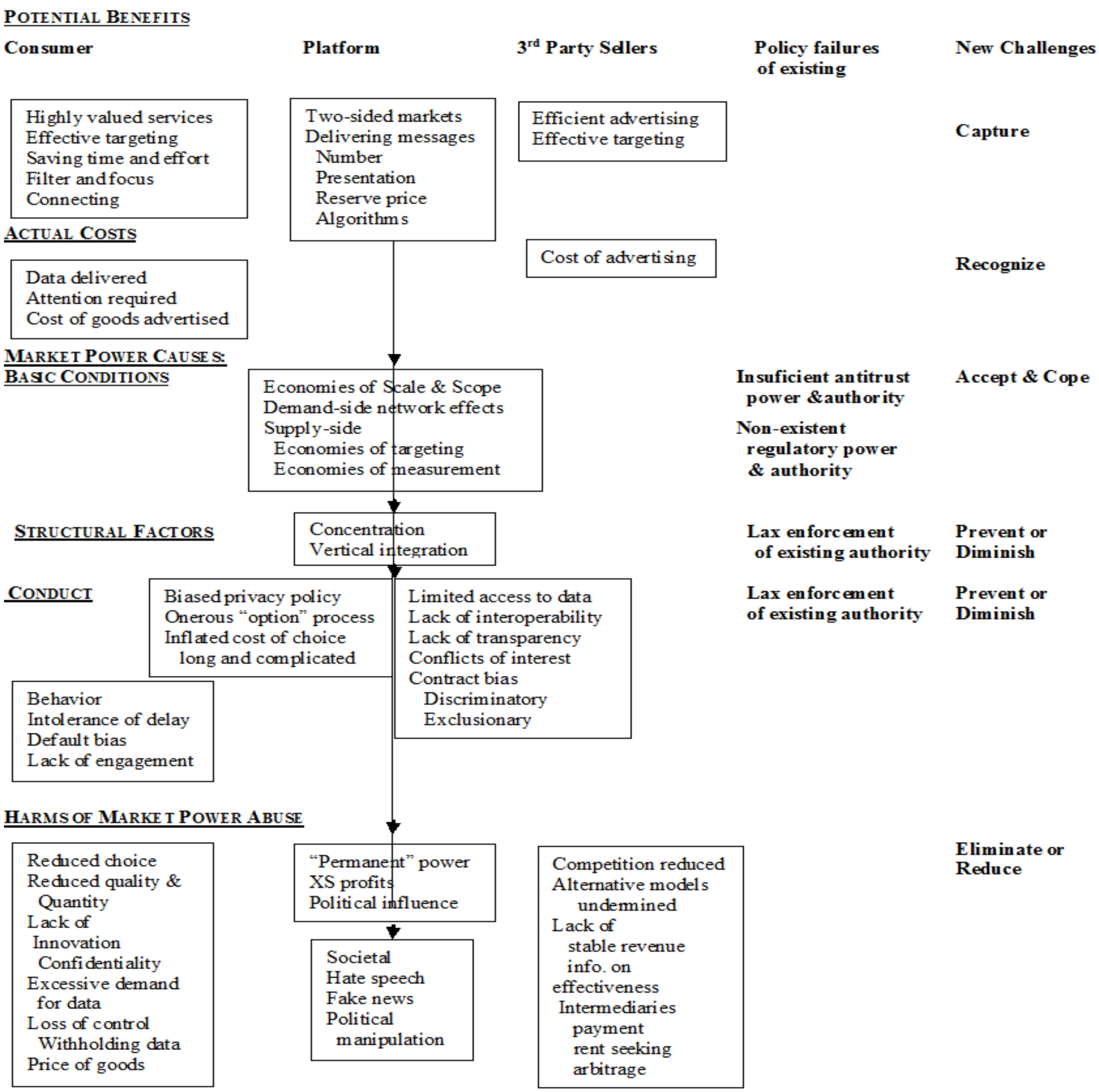
TABLE 10.1: OVERSIGHT OF BIG DATA DIGITAL PLATFORM, ANTITRUST REFORM AND A NEW REGULATORY AGENCY

CHALLENGES OF NEW TECHNOLOGY	STIGLER GROUP ON ANTITRUST AND REGULATION	
	ANTITRUST REFORM	A NEW REGULATOR
Market Characteristics that increase surplus but weaken competition		
(1) Average cost is too low (2) Quality costs are too high (3) Transaction costs are too low (4) Advertising costs are too low (5) Advertising value (targeting) with large databases is too effective(for some/many) (6) Consumer preference v. consumer welfare (7) Increased output v. allocation of output (8) Direct network effect value for communications consumers is too (9) Indirect network effect value to producers of complements are too large (10) Local/global expansion costs are too low	Understand innovation process better (P) Recalibrate perception of risk, false positive v. false negative (P) Speed oversight by shifting burden, evidentiary presumptions, decision frameworks in merger review (L) Clearer thresholds (P) Attention to small firms (L) & Reconsider duty to deal (P) Data barrier to entry (i.e. portability) Separation of data	*Ex ante*, forward looking rules preempt harmful effects Complementary role Speedy deadlines, lower burdens, joint responsibility especially for behavioral remedies Clearer boundaries of unacceptable conduct potential leapfrog competition (P) Data portability (with consideration for data protection)8. Separation of data Study implications of multi-sided
Traditional conduct that reinforces market power		
On the supply-side (11) Limit openness and interoperability (12) Lack of transparency (13) Exclusion or degradation of services (14) Resist data portability (15) Consumer exploited by behavioral economics (16) Complex, opaque transactions On the demand-side (17) Pricing (loyalty and to zero) (18) Contracts (19) bundling (20) Lack of transparency (21) Increasing switching costs (22) Magnifying switching cost through sunk costs and asymmetric information	Supply-side In light of competitive, reexamine: pricing (e.g. zero and loyalty discounts) product design in light of competitive effects (P)	Demand side Prohibit terms raising switching costs (take it or leave it contracts) Unbundling, maximize consumer choice
Consumer behaviors that contributes to entry barriers abuse by dominant firms		
(31) Inherent behavioral biases (24) Data is open to manipulation & exploitation (25) Manipulation of Consumer preference v. welfare (26) Machine learning is uniquely powerful (27) Lack of availability of Information (28) Failure to research and compare	Understand barter better (P) Understand behavioral biases & their exploitation (P) Understand conflicts of interest in multisided (P)	Date Protection Agency Fair information practices Effective choice Algorithmic transparency Define & enforce effective consumer choice
Policy that facilitates or fails to address market power		
Lax antitrust enforcement (29) Structure (mergers) (30) Conduct (fraud and abuse) Lack of regulatory authority (31) Ineffective (privacy) (32) Absent (big data exploitation) (23) Severe challenge of assessing consumer welfare (34) Political impact of weak antitrust & absence of regulation	Multiple agency oversight of mergers (L) Protect competition (L) Need to become more aggressive In enforcement (P)	Multiple agency oversight of mergers Promote competition, monitoring and enforcement of behavioral remedies and firewalls Open standards and interoperability Experience with active, *ex ante* preventions of discrimination, limits on market power, define and break bottleneck power and foreclosure, Non-competition digital goals: experience with universal service, local and diverse ownership, customer proprietary network information New roles in data use restrictions, consumer protection, Procompetitive rules for consumer control of personal data Algorithmic oversight

Sources: *Stigler Committee on Digital Platforms*, April 2020

Figure 10.1 makes the point that these observations are shared widely. It offers a view of the lengthy analysis by The Competition and Market Authority (CMA) in the UK. It has provided a convincing analysis concluding that, while antitrust is part of the solution, it is far from sufficient. The CMA analysis presents, what I believe is a detailed, micro-level structure-conduct-performance framework (see Figure 10.1). The left-hand column of the figure reflects the four main elements of the SCP framework – basic conditions, structure, conduct and performance.

FIGURE 10.1: UK COMPETITION AND MARKETS ADMINISTRATION VIEWED THROUGH THE STRUCTURE, CONDUCT AND PERFORMANCE PARADIGM



Source: United Kingdom, Competition and Markets Authority: *Online Platforms and Digital Advertising: Interim Report*, 2019.

The next four columns bring the analysis down to the factors that operate in the digital communications sector. The characteristics of platforms and their impact on third-party sellers are identified. Then the failures of current oversight are noted, followed by the goals of how new policy should deal with the challenges. The key point is that there are benefits, costs, and basic conditions that operate in the digital communications sector, which must be accepted and recognized if policy is to ensure that the benefits are captured. The basic conditions in this sector pose a severe challenge to competition and markets. There are, however, a host of structure and conduct factors that have made things much worse (i.e., led to extensive abuse). These can be prevented or diminished to reduce or eliminate of the abuses.

ANTITRUST STRUGGLES WITH COMPLEX, BEHAVIORAL REGULATION

It is important to begin with an appreciation for the recent experience of the antitrust agencies. In general, antitrust authorities take action after a harm has occurred and seek to stop the abuse and/or restore competitive conditions. One way to appreciate why antitrust alone is not enough to promote the conditions necessary for innovation is to consider the only circumstance where antitrust is called on to take preventative action – merger review. In merger review, the agencies project the likely impact of a merger and can take action to block or modify the merger and prevent the harm from occurring.

John Kwoka's analysis of antitrust oversight of mergers provides a useful starting point for the discussion in this chapter.[150] While Kwoka's analysis can be criticized on a number of grounds, some of the clearest conclusions are informative for the purpose of this analysis. The notion that behavioral remedies are not as effective in response to mergers is long-standing and not very controversial. The advice on when and how to use conduct remedies points directly to the complementarity of antitrust and regulation.

Antitrust agencies must resort to conduct remedies when divestitures will not work, efficiencies are large, and/or vertical integration is the question. This situation typifies the network platform industries in general, and digital platform communications networks in particular. Given the overwhelming role of such platforms, antitrust is ill-suited to deal with the underlying market power. Historically, as we have pointed out, U.S. policy explicitly subjected key communications infrastructure industries to the dual jurisdiction of antitrust and regulation for precisely this reason.

Kwoka's advice for how such remedies should be structured – transparency, simplicity, and third-party oversight – points to regulation, especially in dynamic industries. The key is that the "intended beneficiaries of access provisions [must not] find it difficult to fully or quickly obtain the necessary access."[151] In our view, bans on specific actions are likely to be the most effective because "important characteristics of effective remedies would seem to be simplicity and transparency." Third-party (e.g., regulatory commission) oversight is important in creating "[f]irewalls to constrain the exchange of competitively sensitive information… Recording explicit communications may help enforce the necessary discipline." Third-party oversight is also necessary because "[w]ithout an outside monitor, target firms may be reluctant to complain since they will continue to have to deal with offending firm."

Doubts about antitrust's ability to effectively implement such an approach continues to rage. The view taken in this paper is that we do not have to push antitrust to or beyond its limits.

We can rely on the well-defined, century-old complementarity between antitrust and regulation in the communication space, adapting it to the dynamic digital environment.

One further observation is in order. Kwoka's critique of behavioral remedies adopted by antitrust authorities not only suggests that the reliance on the FTC will be ineffective, but it also suggests that the FTC itself will be particularly ineffective. Kwoka's analysis shows that the FTC is the "maven" of behavioral remedies in the antitrust space – over eight times less likely to oppose mergers and over twice as likely to rely on remedies. To the extent that Kowka's findings are sound, they apply above all to the FTC.

Table 10.2 identifies 17 reasons why the existing process will not work (most from Economides). Since the market cannot provide a "self-regulatory" solution to the problem, the regulatory regime must provide effective oversight to prevent abuse. The key is before the fact nondiscrimination on which entrepreneurs can rely. Without this strong assurance of nondiscrimination new entrants will be strangled and innovation at the edges without permission will be stifled.

The particular circumstances of the Internet and the unique value of innovation at the edges without permission magnifies the weakness of antitrust. While one might hope that antitrust practice would evolve away from the recent misguided view of markets and the abuse of market power, antitrust moves very slowly and the courts have established thresholds and burdens that favor inaction. The result is more support for legislation than one frequently sees from antitrust practitioners, as the only way to correct flaws that have been baked into the judicial process.

> On similar occasions in the past, most notably in 1914 and 1950, Congress acted to correct the direction that the courts had taken by strengthening the antitrust laws. It is once again time for Congress to step in. In broad overview, Congress should update the antitrust laws to:
>
> - Correct flawed judicial rules that reflect unsound economic theories or unsupported empirical claims
> - Clarify that the antitrust laws protect against competitive harms from the loss of potential and nascent competition, especially harms to innovation
> - Incorporate presumptions that better reflect the likelihood that certain practices harm competition
> - Recognize that under some circumstances conduct that creates a risk of substantial harm should be unlawful even if the harm cannot be shown to be more likely than not
> - Alter substantive legal standards and the allocation of pleading, production, and proof burdens to reduce barriers to demonstrating meritorious cases
>
> Congress also should improve the effectiveness of antitrust enforcement by increasing the resources available to the federal antitrust enforcement agencies and increasing penalties. Even in these recommendations for legislation, the antitrust practitioners are cautious, preferring to rebalanced the process of litigation to promote more vigorous enforcement, but eschewing explicit

prohibitions.[152]

TABLE 10.2: REASONS WHY RELIANCE ON "SIMPLE" ANTITRUST AND TRANSPARENCY WILL NOT PROTECT CONSUMERS, COMPETITION OR INNOVATION

A. The "self-interest" in good behavior is weak where there is a lack of competition.
1. Firms profit from pricing/marketing abuse and controlling the flow of technology.
2. Survey evidence shows these have been the least popular companies in America for decades and it has not changed their behavior. If caught they move on to another abusive practice.
3. Dominant platforms and communications giants have a long history of saying one thing for political ends and doing another for economic ends.

B. Antitrust agencies struggle to address this type of abuse.
4. Structural remedies work much better for horizontal mergers than behavioral.
5. Vertical market power is particularly challenging.
6. Monitoring behavioral remedies is challenging for antitrust authorities, so transparency, simplicity for "third-party" oversight is necessary.
7. *Ex post* antitrust is ineffective to create the environment needed for innovation without permission at the edges.
8. Litigation is slow and case-specific. The communications network companies have been targets of legal challenges for decades and that has not changed their behavior.
9. Network effects are large and vulnerable.
10. Discrimination, with its threat of holdup and need for permission, can chill innovation at the edges without abuse.

C. Transparency won't work for complex bundles of products.
11. Behavioral economics demonstrates the ability to "manipulate" and "exploit" the consumer.
12. Lack of competition (choice) renders complaint useless.
13. Consumer monitoring costs and barriers are very high and responsibility is uncertain in a coproduced service.
14. The communications network companies have been among the worst for consumer satisfaction and that has not changed their behavior.

D. The FTC has repeatedly demonstrated it inability to deal with complex behavioral issues in the digital age.
15. The Microsoft case took half a decade and failed to produce a meaningful consent decree.
16. Facebook took the FTC a decade to enjoin their behavior and the solution may not be effective.
17. The FTC's record on privacy and Do Not Call is abysmal.

REGULATION: ENDURING PRINCIPLES FOR A NEW BIG DATA PLATFORM OVERSIGHT AGENCY

The big data platforms are the new chokepoint in the digital communications sector and they have immense power because they are the portal through which an immense amount of daily activity flows. Their ability to gather, analyze, use and abuse that data to undermine competition and override consumer choice is immense. The Stigler antitrust group has identified the specific economic challenges confronting both antitrust and regulation. The antitrust analysis offered a telling observation. “Data sharing, full protocol interoperability, non-discrimination requirements, unbundling. These are sources of rents that society may determine through appropriate regulation should not be part of the winner’s reward.”[153] There is no need to repeat that analysis here. However, the Shorenstein analysis adds broad principles to guide the regulatory response

Nondiscriminatory Access as a Common Law Duty to Deal

The concept of a common law that allows practice to evolve guided by core social principles has been one of the key pillars on which success in coping with the dynamic transformation of the economy stands. While some lament the flexibility that common law affords, that flexibility ensures the legal structure will not undermine economic development. The leading role of common law nations in the 2nd (Britain) and 3rd (America) industrial revolutions cannot be denied, although many factors may have been in play.

Common law is explicitly the basis for the Sherman Act and has become (through quasi-judicial actions of regulatory agencies) the basis for much regulatory activity. Deference to expert agencies, where statues are “ambiguous,” is essentially a common law approach.

Scholars at the Harvard Shorenstein center argue that the new digital regulatory agency should be based on two specific aspects of the common law, the duty to take care and the duty to deal. I have argued that the latter, in the form of an obligation to provide nondiscriminatory access to the means of communications and commerce, is part of the DNA of capitalism. This obligation was clearly evident half a millennium ago in British law,[154] and early during the 2nd industrial revolution in the U.S. (e.g. 1886),[155] played a key role in the development of the Internet,[156] so there should be little surprise that it has such importance at this turning point in the 3rd industrial revolution. Nondiscriminatory access to consumers through the chokepoint is the key to competition and consumer choice.

While all of the research institutions identify the challenges and make recommendations, a good source of insight into the issue can be obtained by examining what the most important independent service provides, who needed access to the communications network to compete for customers, said was necessary (see Table 10.3).

I explored this issue in a document that reviewed the official filing of an independent long-distance carrier and an independent Internet service provider at the key moment of debate after the passage of the 1996 Telecommunications Act. AT&T Long distance and America Online had not yet been acquired by dominant communications network owners, so they outlined the specific conditions they needed in order to compete. Their observations at this moment were particularly useful, since they would soon be acquired by the dominant firms and change their story.

Nondiscriminatory access to consumers is important for all three different types of competition. Head-to-head competition between platforms would have the greatest effect on the market, but it is the least likely. The large market share in a core service as the basis for ever expanding bundles is a major obstacle to competition. Unbundling becomes a key for freeing

TABLE 10.3: NECESSARY COMPETITIVE CONDITIONS & NONDISCRIMINATION REMEDIES

Competition

1. local competition issues are resolved and the terms and conditions for local entry have been successfully implemented such that practical alternatives to the supply of local services exist in the local market;
2. a demonstration that vigorous and effective competition has evolved in a substantial portion of the market for broadband access services and in the market for BDU services:
3. the broadband tracking requirements have been implemented and reports from the telephone companies satisfy the Commission that treatment of broadband investment and expenses are appropriate;
4. price cap regulation has been implemented in such a manner as to preclude telephone companies from recouping broadband investment costs from utility services, the implementation of an effective price cap mechanism for basic and extended basic services in order to prevent instances of cross-subsidization;
5. the establishment of safeguards to ensure that broadband access services <u>continue</u> to remain available from the telephone companies on a non-discriminatory and unbundled basis.

Interconnection

(1) Comparably Efficient Interconnection: the principle of providing competitors with access to the broadband network on terms that are technically and economically equivalent to those provided by the broadcast carrier to itself.

(2) A prohibition on preferred agency or exclusive arrangements between vertically-integrated broadband access providers and integrated or affiliated information service providers which contain discriminatory access provision, either in terms of price or quality of access.

(3) Access: the ability to make a physical connection to cable company facilities, at any place where a cable company exchanges consumer data with any Internet service provider, or at any other technically feasible point selected by the requesting Internet service provider, so as to enable consumers to exchange data over such facilities with their chosen Internet service provider .

Pricing

- safeguards in order to prevent instances of anti-competitive behavior… implementation of a cost-based price floor to protect against below-cost pricing of broadband access services;
- implementation of a cost-based price ceiling with a limited mark-up to prevent excessive pricing of access services in uncontested markets;
- implementation of a third-party access tariff, allowing for non-discriminatory and unbundled access to broadband bottleneck facilities, as well as comparably efficient interconnection and associated non-price safeguards;
- implementation of price caps, accounting separations and other safeguards against anti-competitive cross-subsidization;
- imputation of appropriate third-party access tariffs to value added information services providers by broadcast carriers.

Non-price safeguards

- able to gain comparable access to network bottlenecks;
- protected against abuse of confidential information which is provided to the bottleneck access provider;
- not otherwise disadvantaged in the market by the bottleneck access provider through, for example, the negotiation of exclusive or preferential agreements with other service providers.

Bundling

- the bundled service must cover its cost, where the cost for the bundled service includes:
- the bottleneck component(s) "costed" at the tariffed rate(s) (including, as applicable, start-up cost recovery and contribution charges);
- competitors are able to offer their own bundled service through the use of stand- alone tariffed bottleneck components in combination with their own competitive elements;
- resale of the bundled service permitted…

Sources: AT&T Canada Long Distance Services, "Comments of AT&T Canada Long Distance Services Company," before the Canadian Radio-television and Telecommunications Commission, Telecom Public Notice CRTC 96-36: Regulation of Certain Telecommunications Service Offered by Broadcast Carriers, February 4, 1997. At the federal level, AOL's most explicit analysis of the need for open access can be found in "Comments of America Online, Inc.," In the Matter of Transfer of Control of FCC Licenses of MediaOne Group, Inc. to AT&T Corporation, Federal Communications Commission, CS Docket No. 99-251, August 23, 1999 (hereafter, AOL, FCC). America Online Inc., "Open Access Comments of America Online, Inc.," before the Department of Telecommunications and Information Services, San Francisco, October 27, 1999.

customers to switch suppliers. Access enables competition for complementary services. The hope is that a seller of complements will add enough customers to consider entering the access business. Competition in complements is a benefit, competition in access would be the big enchilada.

However, access is a complex concept. To support competition both the supply-side (reducing barriers to entry) and the demands-side (reducing switching costs) must be dramatically changed: interconnection and interoperability are needed for a technical link, unbundling and elimination of anticompetitive contracts is necessary to free customers, rigorous nondiscrimination including pricing and technical quality is necessary to make it possible for competitors top make an attractive offer.

Participatory Governance

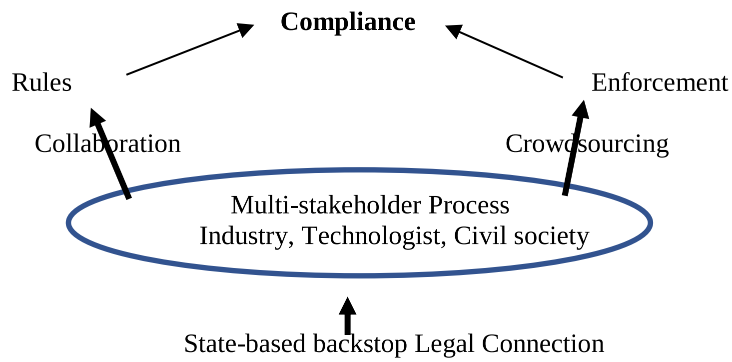
The Shorenstein Center proposal also envisions a process of regulatory negotiation to improve outcomes. I called it participatory governance in an earlier piece.[157] It is quite consistent with Brandeis' support for industrial democracy in the early phase of the 2nd industrial revolution. Whatever one thinks about how well the effort to implement industrial democracy worked or how far it advanced, the search for a new form of democratic participation is an important aspect of the technological revolution. The 3rd industrial revolution is no different.

There is every reason to believe that the pubic (consumers) can benefit from and contribute to improved regulation as much as industry (producers), just as end-user innovation has enhanced the performance of many areas.[158] Balancing the approach may also reduce political tension. If regulatory approaches can be identified that are seen as effective but more flexible than traditional regulation, resistance may be reduced on both sides.

As described in Figure 10.2 consistent with the Shorenstein proposal, participatory governance is envisioned as a multi-stakeholder process that involves industry, civil society and technologists in both the writing and enforcement of rules. The ultimate goal is to foster compliance, rather than enforcement. The participants are the three sets of non-governmental interests. The activities are rule writing and enforcement. Participatory governance is supported by the state in the delegation decision. Although it is an attractive approach to increasing participation and achieving wider support for regulation and good behavior, there are many factors that determine how successful it will be. The key factors are shown in the table below the graph in Figure 10.2. Multi-stakeholder processes have worked in key areas of the Internet, but there were unique conditions that made this success possible.[159]

However, since guardrails and guidance must be "imposed" by regulation, the state must be closely involved in establishing and monitoring the process. Ultimately, if the participatory process produces a consensus rule, that rule can be given great weight in a regulatory process that adopts it as policy. With strict timelines, adoption and enforcement from the sponsoring agency, this could become the main approach to rule-making.

FIGURE 10.2: THE STRUCTURE OF PARTICIPATORY GOVERNANCE



ATTRIBUTES OF AN EFFECTIVE ALTERNATIVE REGULATION STRUCTURE

Transparency/Openness
- Clarity of Purpose
  - Dialogue
  - Consensus
  - Informing policy process
  - Influencing decisions
  - Planning
  - Implementation
  - Monitoring and evaluation
  - Data gathering and analysis
- Clarity of Process/Rules
  - Governance
  - Convening
  - Decision rules
    - Voting
      - Unanimity (Veto)
      - Super Majority
      - Majority
    - Non-Voting Rough Consensus
    - Right of Appeal, Dissent
- Scope of "Authority"
  - Rules only
  - Review of operations & goals

Enforcement – Compliance
- Accountability
- Fairness
- Speed
- Appropriateness
- Complaint and Audit
- Adequacy of Resources

Participation
- Public Awareness
  - Rights - Redress
  - Public consultation
- Inclusiveness
  - Access
  - Representativeness
  - Organization of groups
  - Resources
  - Expertise
  - Role of independents
- Adequacy of Resources
  - Overall
  - For NGOs
- Industry Coverage
  - Achieve Critical Mass
  - Avoid "Capture" & Ballot packing

Legal Clarity
- Relationship to gov't.
  - Formal
    - Sponsored
    - Recognized
    - Status of Decisions
      - Safe Harbor
      - Reg.-Neg.
      - Sponsored
      - Recognized
      - Preferred
      - Advisory
  - Informal
    - Bully Pulpit- Nudge
    - Procurement
    - R&D
  - International

Desired Results
- External
  - Credibility
  - Legitimacy
  - Effectiveness
  - Efficiency
  - Adaptability
  - Flexibility
- Internal
  - Building Trust
  - Shared Knowledge & Expertise
  - Culture of Cooperation & Leadership

Sources: Mark Cooper, "The Quarter-life Crisis Based on:
Hans Bredow Institute, Final Report: Study on Co-Regulation Measures in the Media Sector, University of Hamburg, June 2006http://ec.europa.eu/avpolicy/docs/library/studies/coregul/final_rep_en.pdf, at 118-123,

Bert-Japp Koops, et al., Starting Point for ICT Regulation, B-J Koops, et. al (Eds.), Starting Points for ICT Regulation, ITER, The Hague, 2006http://rechten.uvt.nl/prints/upload/200662790842312037944.pdf, at 133-140.

Bart Cammaerts, "Civil Society participation in multistakeholder processes: in between realism and utopia, *LSE Research Online*, 2009

11. “DOS AND DON’TS:” BUILDING GUARDRAILS AND GUIDANCE FOR DIGITAL COMMUNICATIONS

JUSTIFICATION FOR OVERSIGHT

Making the case for economic regulation, Alfred Kahn pointed to the fact that because communications networks exhibit economies of scale, the market will support only a small number of large firms compared to other sectors of the economy.[160] In addition, because of the essential inputs these large firms provide, they influence the growth of other sectors and the economy.[161] They are infrastructure.

Kahn’s description of the rationale for regulating infrastructure encompasses three major economic principles. He starts with what is essentially a positive externality – a public goods argument. The broad economic impact means that private individuals might not see the benefits, or might be unable to appropriate (capture) that value in the form of profits, so they will invest less in the provision of service than is socially justified. In addition to this macroeconomic impact, those who are unserved or priced out of the market are disadvantaged at the individual level. Capitalists won’t serve them because they are not typically profitable.

An extension of this argument for the communications network involves achieving ubiquitous, seamless interconnection and interoperability, which is not a likely outcome of market forces alone.[162] Ubiquitous, seamless interconnection and interoperability are a highly desirable characteristic of infrastructure networks that achieve important network effects, another positive externality.[163] I have argued that competitive communications and transportation networks do not inherently produce this outcome because of the perverse incentives of dominant providers of bottleneck facilities,[164] and because the high cost of negotiating interconnection creates obstacles to seamless interconnection. Government policy has repeatedly been forced to step in to achieve the desired outcome.

Kahn added two other characteristics as potential justifications for regulation: “natural monopoly” and “for one or another of many possible reasons, competition does not work well.”[165] Although Kahn was skeptical of the monopoly rationale for regulation, he later argued that the nature and extent of competition is an empirical question:

> The question is not simply one of *how much* competition to allow—how much freedom of entry or independence of decision making with respect to price, investment, output, service, promotional effort, financial, and the like. It is a question also of what, in the circumstances of each regulated industry, is the proper *definition,* what are the *prerequisites*, of effective competition.[166]

Establishing the preconditions for competition is a policy action that greatly affects the outcome, but the ultimate outcome, the actual growth of competition that prevents the abuse of market power is what matters most. Two decades after the passage of the Telecommunication Act of 1996, which aspired to supplant regulation with competition, the critical question is not, “Is there more competition?” Rather, the question is, “Is there enough competition to prevent abuse?” This analysis shows that the answer must be a resounding no.

The second rationale offered by Kahn is a market structure problem. Very large economies of scale mean that building multiple networks raises costs. The market will not support competition. In the extreme, we run into the problem of a natural monopoly. Firms that become too large behind high barriers to entry, transaction costs on the supply-side, high switching costs or other behavioral flaws on the demand side, obtain market power. Monopolists (natural or otherwise) have market power and there is a strong incentive to abuse it. With the incentive and ability to exercise it, they engage in behaviors that harm competition (by creating additional obstacles to entry or extending their market power to complementary markets) and consumers (raising prices and restricting choices). Regulation controls market power. However, monopoly is not the only reason to implement public policy. It has never been a necessary condition to impose common carriage in the communications and transportation sectors.

Infrastructure industries exhibit several market structural problems. They deliver service with relatively low elasticities. In fact, they can be considered "necessities" since they have a combination of low-price elasticity and moderate-income elasticity.[167] The low-price elasticity means it is difficult to go without communications or find good substitutes. The moderate-income elasticity means the good commands a significant part of the household budget all the way up and down the income distribution, but the percentage declines as income rises. The important role of communications in the broader economy and for households magnifies the ability to exercise, as well as the impact of, the abuse of market power.[168]

Deployment of facilities to compete with an incumbent communications network is costly and difficult. Network effects – the ability to reach large numbers of customers to make the network more valuable to each individual customer – are important. Therefore, the communications sector provides a fertile ground for the abuse of market power. Its size, great importance to the functioning of the economy, and underlying economic characteristics suggest that the existence and persistence of market power is a problem. It has made this sector the target of a great deal of public policy.[169] Elasticities of demand and supply are low compared to other sectors. The key services supplied to consumers in the digital communications sector (broadband and wireless) exhibit the elasticities of necessities.

Social Values

We turn next to Kahn's third reason for regulation – "other." Although it is less specific, it can be given several referents in the communications space. Competitive markets do not deliver universal service because there are significant parts of society where the rate of profit does not support extending the infrastructure or making it affordable. Rural/high-cost areas and low-income populations may not be very attractive from an investment point of view, but they are important from a public policy/social values point of view.

Freedom and diversity of opinion and voices are extremely important socio-political values that may not be accomplished by a competitive market. They may or may not be profitable, but society simply cannot leave them to the vagaries of the market. Speech and diversity are perhaps the most important examples of these values.[170] Communications is well-recognized as a key to democracy, and many consider it a human right.[171] The challenge is not simply to ensure that all have the opportunity to speak, but also to address gross imbalances in those opportunities. Many citizens deserve more speech than the market affords them.

THE IMPORTANCE OF DUAL JURISDICTION

The commitment to competition and consumer protection created a strong commitment to dual jurisdiction. Economic regulation and antitrust were focal points of policy activity in the late 19th century as large corporate entities, above all the railroads, became more important and ultimately dominant in the economy. Dual jurisdiction was applied very early in the development of telecommunications, as shown in Table 11.1. The telecommunications sector is a useful example here because it is a critical part of the communications sector and a strong complement for big data platforms.

TABLE 11.1: THE LONG HISTORY OF DUAL OVERSIGHT IN THE COMMUNICATIONS SECTOR

Year	Regulation	Antitrust
1887	Interstate Commerce Act	
1890		Sherman Act
1910	Mann-Elkins Act	
1913		ATT/DOJ Consent Decree
1914		FTC Act
1927	Radio Act	
1934	FCC Act	
1945		Associated Press
1949		Final Judgment
1956		Modification of Final Judgment
1968	Carter Phone and Computer Inquiries	
1969	Red Lion	
1984	Spread spectrum decision leading to Cable deregulation	Break-up of ATT
1987		Triennial reviews begin in the Antitrust court
1992	Cable Reregulation (Consumer Protection Act)	
1996	Telecom Act of 1996	
2003	Cable Modem Order	
2005	Madison River	
2005	Wireline Broadband Order	
2010	Open Internet Neutrality Order	Ticket Master
	Comcast/NBC Merger Conditions	Comcast-NBC Consent Decree
2011	ATT/T-Mobile merger blocked	
2013	Data Roaming Order	e-Book Price Fixing
2014	Open Internet Order remanded	
	Universal Service Reform Upheld	
2015	Title II jurisdiction over Broadband Under the Communications Act of 1934	
2017	Administrative Repeal of the '34 Act	

In a sense, the communications networks were the chokepoints that policy successfully opened to create the environment that allowed the Internet to flourish. The big data platforms have become the new chokepoint in the digital communications sector.

In 1897, the first federal regulatory agency created in the progressive era – the Interstate Commerce Commission[172] – was given the authority to prevent railroad corporations from charging rates that were "unjust," "unreasonable," "unjustly prejudicial" or "discriminatory."

The Mann Elkins Act of 1910 quickly extended the Interstate Commerce Act to the telephone network.[173]The telephone industry became the target of one of the first antitrust consent decrees under the Sherman Act,[174] a continuing series of complaints and consent decrees that culminated in the largest divestiture of private property ever required in an antitrust case.[175] The ongoing antitrust oversight over the industry was one of the factors behind the Telecommunications Act of 1996.

. This dual jurisdiction frequently interacts, with antitrust driven development later being incorporated into economic regulation. Congress codified the frameworks developed by the FCC and the modification of the consent decree in the antitrust case against AT&T. This important role of balanced, dual oversight has continued into the digital era. FCC policy decisions over the course of a decade (Carterphone,[176] the Computer Inquiries[177] and Spread spectrum[178]) that ensured open access to and nondiscriminatory treatment of traffic on the communications network were critical to create an environment in which the Internet grew to dominate communications. Antitrust cases have continued to protect competition on the platforms that make up the digital communications sector, with the most spectacular being the AT&T breakup.

It is not an exaggeration to say that the success of the modern communications sector rested on this dual oversight of the industry, which strove to keep it as competitive as possible and pressed it toward progressive goals, given the available technologies.

THE FEDERAL TRADE COMMISSION

The FTC has an abysmal track record on preventing abuse. It dithered for five years in the Microsoft case and arrived at a consent decree that was so totally inadequate the Department of quickly brought a new case and won a landmark ruling. The FTC spent a decade studying privacy but failed to take any effective action. Its “Do Not Call” program (handed off to the FCC) is a disaster. Its consent decrees with Facebook have been repeatedly violated over the course of a decade.

The FTC’s Institutional Weaknesses

The FTC became concerned about Microsoft’s behavior in late 1989. Almost four years later, the FTC had failed to take action and, in a rare and damning move, transferred the file to the DOJ. The failure of the FTC to act reflected both its internal structure and the difficulty of the policing the abuse of market power in digital technologies.

The FTC was tied up both by ambiguities in its authority and its five-member structure which required a majority of commissioners to vote for an action. As an independent agency, “the FTC is subject to congressional oversight…. This relationship… invited those seeking to influence the FTC to pursue a two-front lobbying strategy focused on the five commissioners and also the engaged members of the oversight committee.”

With one commissioner recused, the FTC first attempted to act on the staff recommendation for a finding of liability in the Microsoft case, but failed to act on a 2-2 vote. The Chair, who had voted for action, brought the issue back up in the form of an *administrative* *complaint* against Microsoft under § 5(b) of the FTC Act. Andrew Gavil describes this route as follows:

> In lieu of a petition to a federal court seeking an immediate preliminary injunction, proceeding under § 5(b) would commit the case to further proceedings within the FTC… an administrative proceeding would delay an assessment by the FTC… until after an administrative trial and, presumably an appeal back to the FTC… and possible judicial review of a commission decision by the federal court of appeals… it would be years before the FTC would be able to mandate any changes in Microsoft's conduct.

While the FTC suffered from institutional and process challenges, once the DOJ got the case it faced substantive hurdles that raise fundamental problems – network effects, incremental abuse of market power, and integration. The challenge of network effects loomed large in the debate over the proposed consent decree.[179]

With strong economic forces pushing toward markets with large dominant firms and very small numbers of competitors, if not monopolies, *ex post* enforcement of antitrust violations encounters a problem that plagued the Microsoft remedy in both antitrust cases brought by the DOJ. Finding liability could easily address the practices intended to preserve or extend the monopoly, but had difficulty reaching the underlying market power. Gavil and First conclude that the U.S. antitrust system is very complex.

> [R]emedies in monopoly maintenance cases tend to focus on enjoining conduct that helps to maintain the monopoly and undoing the *incremental* degree of power (or incremental insulation from erosion of power) that can be attributed to wrongful conduct. Correctly isolating an removing the increment can be difficult, however. [180]

A Social Value, Privacy

Much of the debate over privacy's influence is characterized by a difference in the framing of the fundamental nature of privacy. Some public interest groups have advocated the view that consumer privacy is a right to be protected, not a harm to be avoided. The notion that privacy is a human right goes back centuries. In modern times, it is found in the 1948 United Nations Declaration of Human Rights [181] and in many international conventions and treaties.

However, whether or not one believes privacy is a human right or an independent social goal is irrelevant. Even if it is not an inherent value, but "just" a market commodity as some argue, there is overwhelming evidence of market failure that should have been but was not addressed by the FTC. Therefore, it can be argued that the marketplace is ill-equipped to deliver privacy, much like it is ill-equipped to deliver universal service or seamless interconnection. A regulatory agency has an important role to play to address these market failures, above and beyond the market power that network operators possess.

Concerns about online privacy have been expressed from the earliest days of the commercialization of the Internet. Privacy merits analysis as an important aspect of communications policy in the digital age for three reasons.

- It is a deeply felt qualitative issue that raises concerns about the fundamental definition and treatment of communications, heightened by the firestorm over surveillance.
- Analysis of the digital markets shows many imperfections in the treatment of privacy that reflect the changes in technology and how they affect the relationship between consumers and producers.
- The FCC's decision to propose rules governing privacy as it is affected by the operation of the communications network shows the importance of the legal classification of services and the special power of communications network.
- The opposition to regulation from the *laissez-faire* advocates reflects a primary theme in their reaction to change in the telecommunications sector – the claim that antitrust oversight is all that is needed

The intense concern about privacy is reflected in a dozen reports by the FTC commencing at the very beginning of the official launch of the Internet as a commercial undertaking, [182] as shown in Table 11.2. A Federal Trade Commission report in 1999 led to the creation of a voluntary self-regulatory regime. In November of 2007, the Federal Trade Commission held a Town Hall meeting to promote discussion about how to address concerns about behavioral advertising and the broader problem of online privacy. Soon thereafter it issued Online Behavioral Advertising Self-Regulatory Principles issued by the FTC on December 20, 2007. While the FTC generally denied any need for regulation, the final report in this sequence acknowledged a significant problem, and fashioned a new category of action. After a decade and a half of denial, the FTC declared that Given these limitations, Commission staff supports a more uniform and comprehensive consumer choice mechanism for online behavioral advertising, sometimes referred to as "Do Not Track." Such a mechanism could be accomplished by legislation or, potentially, through robust, enforceable self-regulation.[183]

My analysis of the government reports shows that even if one approaches the issue from the point of view of market performance and market imperfections as outlined early in this paper, there is more than enough evidence of the threat to the public welfare to justify dramatic changes in public policy designed to improve consumer privacy protection. Given the focus of this analysis, I examine the economic aspects of the privacy issue. Table 11.2 uses the FTC and DOC paper to illustrate that the market imperfections leading to the market's failure to protect consumer privacy are pervasive. The FCC claimed by that by eliminating its oversight, it was allowing the FTC to reenter the privacy space.

The pervasiveness and nature of the market imperfections led the conclusion that much more than transparency is necessary to correct the failure of the market to provide adequate privacy protection. The relationships between information gatherers and the technology of information gathering and exploitation make it highly unlikely that consumers will be able to keep up with and evaluate information on a real-time basis. Even where they have the skills and abilities, the transaction costs of doing so on a transaction-by-transaction basis would be very high.

TABLE 11.2: MARKET IMPERFECTIONS LEADING TO THE FAILURE OF PRIVACY PROTECTION IN CYBERSPACE

Societal: Situations where important values are not well reflected in market transactions
Externalities: Trust is undermined[1]
Non-economic Values: Concern,[2] Fear of Being Monitored,[3] and Exposed,[4] Reputational Harm,[5]
Unwanted Intrusion,[6] Physical Security,[7]
Structural: Conditions that result in inefficient outcomes
Insufficient Competition: Incomprehensible Privacy Policies,[8] Inadequate Choice[9]
Economic Harm: Bad Purchase Decisions,[10] Security Breaches,[11] Identity theft [12]
Endemic: Tendencies of economic relations that undermine key market functions
Perverse Incentives: Incomprehensible Privacy Policies,[13] Slow to React[14]
Asymmetric Information: Speed of Technological Change[15] v. Slowness to React,[16] Difficulty of Detecting Harm,[17]Invisibility of Transactions and 3rd Party Relations[18]
Transaction costs: Frictions that impose costs and constrain exchange
Search and Information Costs: Lack of Simple and Clear Information,[19] Cost of Interrupting Transactions to Find, Evaluate and Act to Protect Privacy,[20] Invisibility of Transactions and 3rd party Relations to Consumers[21]
Bargaining Costs: Lack of Alternatives,[22] Inability to Define[23]
Policing and Enforcement Costs: Difficulty of Detecting Harm,[24] Complexity, Level and Amount of Information Gathered,[25] Rapid Pace of Technological Change,[26] Third Party Relationships[27]
Behavioral: Psychological and other human traits that bound "maximizing" actions
Motivation: Concerns,[28] Fear of Being Monitored[29]
Perception: Reputational Harm [30]
Calculation: Failure to Understand,[31] Failure to Appreciate Risk,[32] Lack of Awareness[33]
Execution: Struggle to Keep Pace,[34] Do Not Read[35]

Sources and Notes: U.S. Department of Commerce, *Commercial Data and Innovation in the Internet Economy: A Dynamic Policy Framework,* December 2010; Federal Trade Commission, *Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers,* December 2010.

1. DOC, pp. vi, 1, 13, 15.
2. FTC, pp. iii, 28-30, DOC, pp. 3, 16-17.
3. FTC, p. iii.
4. FTC, p. 20.
5. FTC, p. iii.
6. FTC, p. iii.
7. FTC, p. iii.
8. FTC, pp. iii, 26.
9. FTC, p. 19.
10. DOC, p.1.
11. DOC, p. iii.
12. DOC, p. 1,
13. FTC, pp. iii, 26.
14. FTC, p. iii, DOC, p. 1.
15. FTC, p. 36.
16. FTC, p. iii.
17. FTC, p. 33.
18. FTC, pp. I, iii, 26.
19. DOC, p. vii
20. FTC, p. 27
21. FTC, pp. iii, 26.
22. FTC, p. iii.
23. FTC, p. iv, 35,
24. FTC, p. 33.
25. FTC, pp. ii, DOC, p. 18-19.
26. FTC, pp. ii, iii.
27. FTC, pp. ii, DOC, p. 16.
28. FTC, pp. iii, 28-30, DOC, pp. 3, 16-
29. FTC, p. iii.
30. FTC, p. iii.
31. FTC, p. ii, 26, DOC p. 4.
32. FTC, p. ii.
33. FTC, p. ii.
4. FTC, pp. ii, 26.
35. FTC, p. iii.

Adding in concerns about values only reinforces the conclusion that voluntary self-regulation is insufficient. Behavioral targeting may be particularly harmful to vulnerable populations, including youth and the elderly. Although the survey data showed that few consumers of any age comprehend the trade-offs involved with behavioral targeting, youth and the elderly are at special risk of not understanding the consequences of being tracked online.

The Federal Trade Commission's (FTC) Self-Regulatory Principles for Online Behavioral Advertising and voluntary industry self-regulatory programs have proven inadequate to ensure that consumers have effective control if they do not want their online behavior to be tracked for purposes beyond fulfilling the transactions they make. If the current regime were effective, why would the DOC repeatedly acknowledge that more needs to be done?

- Only if consumers are strongly interested, extremely literate, well-informed and highly skilled can they negotiate the opaque, inconsistent morass of opt-out procedures, and even then, there are numerous data collection and tracking mechanisms that go undisclosed.
- Unfortunately, the vast majority of consumers lack one or more of these characteristics and therefore are not protected.
- Somewhat less than 5 percent of consumers are effectively able to protect their privacy.

The FTC had not seen fit to regulate any of it although it had been looking at the issue for over a decade. Nothing would change with the elimination of Title II, except the network owners would be in a better position to exploit the customer proprietary information that they gathered in the course of providing communication services

Privacy and Data

The Stigler antitrust group claims a single focal point on competition and repeatedly notes that there are other groups working on "non-economic" issues like privacy. However, in reviewing the recommendation about how to restore and ensure competition in the big data platforms, it is clear that a major component of that effort involves the collection, use, and abuse of data on individuals and groups. A simple observation reconciles the two different aspects of the analysis. Without a vigorous and effective set of institutions to protect privacy, the performance of the big tech platforms will continue to disappoint. Privacy advocates would go farther in limiting data flows.

Data portability, which is a classic antitrust policy solution to restore the potential for competition, embodies the tension between the two points of view. Data should be portable, but without an effective set of institutions to constrain producer collection and use of data, not to mention consumer control (sovereignty) over that data, there is no reason to believe data portability will improve the competitive situation.

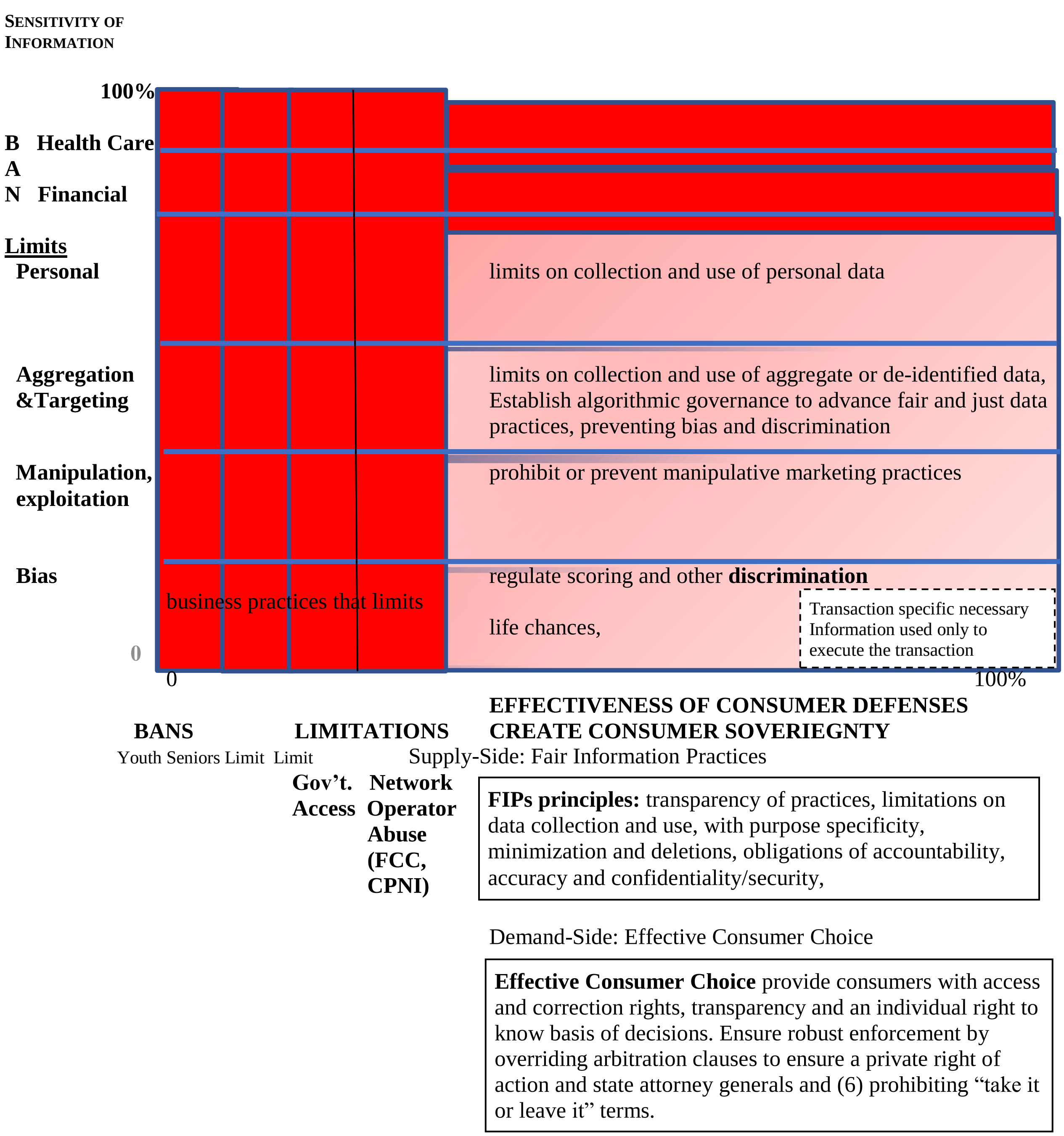
While consumer and privacy advocates pick up each of these threads that are anchored in the impact on competition, their concerns go well beyond this issue. At the outset, it is important to note that these advocates insist we need legislation because existing institutions and agencies have been inadequate and are hopelessly trapped by weak law or ineffective (bad) practice.

> We call for federal baseline legislation that ensures a basic level of protection of all individuals in the United States… While the Federal Trade Commission (FTC) helps to safeguard consumers promote competition, it not a data protection agency. The FTC lacks rulemaking authority. The agency has failed to enforce

the orders it has established. The U.S. needs a federal agency focused on privacy focused on privacy protection, compliance with data protections obligations, and emerging privacy challenges. The agency should also examine social, ethical, and economic impacts of high-risk data processing and oversee impact-assessment obligations.

Figure 11.1 defines these issues based on a joint statement of a number of consumer/privacy advocate groups. It uses two dimensions. On the x-axis is the ability of consumers to defend themselves from the abusive collection and use of data. On the y-axis is the sensitivity of information.

FIGURE 11.1: CONSUMER/PRIVACY ADVOCATE ISSUES FOR A DATA PROTECTION AGENCY



Beginning on the x-axis, certain groups were historically seen as unable to defend themselves, like children, youth, and the elderly. Recent events suggest that average citizens have been unable to defend themselves from government surveillance. We show these are red areas where prohibitions have been (or need to be) strong.

On the y-axis, there are types of information that have traditionally been deemed so sensitive as to require special rules – healthcare and financial information, for example. These rules may have to be updated. Again, we show these are red areas where protections or prohibitions must be strong. The much larger task is to develop rules to deal with other types of information. Both types of information and uses can be included on this dimension.

The graph shows a tentative safe harbor for information that is transaction specific (used only to complete a transaction and for no other purpose). It would be convenient if this space was easy to define, as it was in the physical age, but in the digital age it is not. It is a space that is needed, but will be contested.

AVOIDING THE EXTREMES: UTILITY-LIKE REGULATION AND ATOMISTIC COMPETITION

A good, stiff dose of reinvigorated competition is certainly needed, as is regulatory oversight that reflects fundamental economic, social, and political values. The question is: how should stricter antitrust and new regulation be imposed? The following brief discussion focuses on economics as derived from the Brandeis- Stiglitz analysis developed herein. However, as analysts and advocates have rushed to take progressive positions within the contemporary policy debate with very broad recommendations, it is important to show why a complex, balanced position seems superior at a general level.

In the position of central planners, we find a call for utility-like regulation of all big digital firms. This view has an overly optimistic evaluation of utility regulation and little regard for efficiency given the nature of the technology to be regulated. We can make this case with observations from both history and contemporary policy. Brandeis, Stiglitz, and the New Deal had several distinct regulatory models for different sectors depending on the nature of the function performed by the sector. Here, I offer four observations that connect with the debate over utility-like regulation.

First, in addition to the utility model, which was actually quite limited, there was a model for the financial sector and other sectors that was less "regulatory" than utility-like regulation. In addition to finance, this was applied to public safety, labor, and other sectors.

Second, interestingly, when the Obama administration decided that it needed the authority under the Communications Act of 1934 to ensure basic values in the age of digital transmission over communications networks, the administration invoked Title II, where utility-like regulation resides. However, it eschewed more than four-fifths of the sections of that title, including the most classical utility regulation – rate setting, tariffing, and pre-approval of offerings. In other words, given the battle over network neutrality, it sought to make the smallest claim to authority possible.

Third, over the course of eight years, the FCC, sustained by the courts, developed and implemented a hybrid model that was very much oriented toward competition and market flexibility (such as wireless interconnect, i.e., roaming, universal service). The goal was to establish a strong principle of nondiscrimination while preserving the flexibility to innovate (i.e., without pre-approval or tariffing of service). This complex approach is more challenging, but the benefits of preserving flexibility and innovation are worth the trouble.

Finally, historically, the biggest failures of regulation have involved rigidities of utility-like regulation that should have been avoided. Although these are rare, they are real and they are the mistakes to which market fundamentalists point in their attacks on regulation. The call for utility-like regulation invites this market fundamentalist subterfuge unless one explains how these big mistakes will be avoided.

Utility-like regulation in communications (Title II standards) are imprecise even after three-quarters of a century of regulatory practice and case law. Congress pragmatically used loose language to deal with challenges in the regulation of a dynamic sector like telecommunications. The underlying technology has always been more dynamic than the law, and this has become overwhelmingly apparent in the digital era. Drawing bright lines before the fact will provide greater certainty once the rule-making and litigation are done, but therein lies the rub. Bright lines can easily undermine innovation, and the Stiglitz critique of, even well-intentioned market socialist administrators deserves careful consideration.

Moreover, the general approach to utility-common carrier regulation is challenging from the point of view of the Internet innovation system. The Brandeis-Stiglitz emphasis on oversight to make markets work better has special force in the digital space. Utility regulation is about homogeneity and stability. It thrives in static environments and, inevitably, reinforces the stasis of the environment because it operates best by creating silos with categories of producers and consumers, definitions of acceptable behavior, and permissions required to act. These service categories and "does & don'ts" are hashed out in administrative proceedings and court cases that can stretch out for years or even decades. The cost of delay can be ignored because the sector is so static.

Digital communications networks are the antithesis of common carrier telecommunications networks. They thrive on diversity and prosper with dynamic change. The essence of utility regulation is antithetical to the experimentation, innovation, and entrepreneurship that have been the hallmark of the digital economy. In a dynamic environment, the costs of delay and the value of lost services – innovation that is never brought to market – are high. Greenstein's description of how experimentation works makes this point clear, "because nothing precluded this unanticipated use from growing, grow it did." In the utility-common carrier approach, everything is precluded until it is permitted, and problems immediately end up at the Commission for adjudication. "Brutally simple" bright lines that opened the way to entrepreneurial behavior worked in the past, unlike detailed regulation of behavior.

At the other extreme are those who argue that atomistic competition enforced by reconceived and aggressive antitrust is needed. This would break up everything with little regard for efficiency, under the presumption that efficiency is the culprit for many recent abuses. Historically, market fundamentalists argued the opposite of the neo-Brandeisian atomistic antitrusters (i.e., that the presumption should be in favor of size, not against it).

The analysis of antitrust in the New Deal raises several important points.

First, while Brandeis might have been more comfortable with atomistic antitrusters' position, he was unwilling to abandon efficiency.

Second, Thurman Arnold argued lax enforcement should not be used as an excuse for abandoning the fundamental approach to antitrust. The general consensus is that he accomplished his goal. The pragmatic compromise he advocated proved to be effective until it was explicitly abandoned.

Third, FDR's claim that the Supreme Court had shackled him with a "horse and buggy" economy was too extreme. Here, too, the pragmatic compromise proved to be effective until it was explicitly abandoned. The later New Deal that Brandeis supported provides several examples in specific sectors.

Fourth, bans should be restricted to things that simply cannot be regulated well.

In finance the New Deal relied on regulation, but also chose to ban the comingling of banking and investment (Glass-Steagall) because the resulting conflicts of interest and perverse incentives were too strong to regulate. The Public Utility Holding Act banned interstate utilities unless the utility could prove efficiency gains from direct interstate connection through the grid. For over half a century these laws did their job remarkably well, and every time a hole was poked in them, bad things happened, to say the least (e.g., the financial meltdown, PURPA).

Fifth, with a great deal of ambiguity in the New Deal and flexibility in its implementation, the FCC seems to have done a good job of promoting progress and universal service. It was only after the breakup of AT&T, the effort to make subsidies explicit, and, ultimately, the ill-considered decision to deregulate prematurely that neoliberal ideology was able to undermine the public interest.

CONCLUSION: A PRAGMATIC, PROGRESSIVE APPROACH TO OVERSIGHT

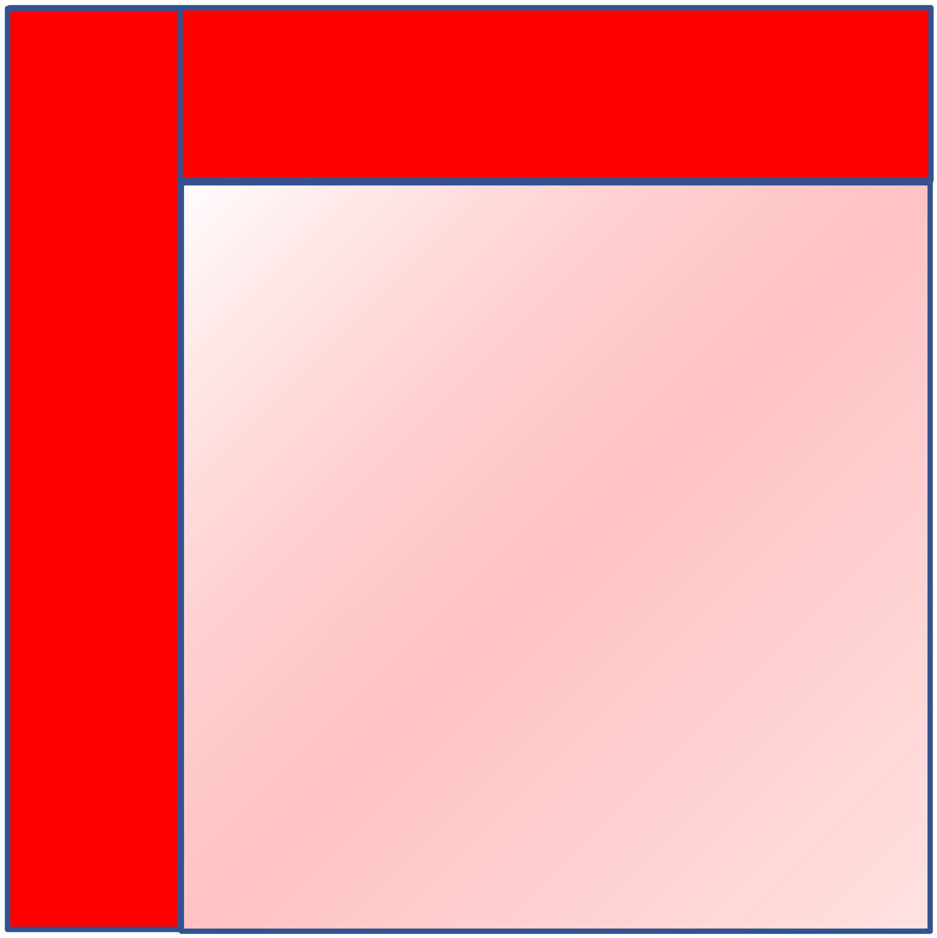
The discussion of the limitations of simple extreme approaches and the earlier discussion of privacy and data point to a broader formulation of how pragmatic progressive oversight can work to prevent abuse, while continuing to rely on competition in markets, which is at the heart of pragmatic, progressive capitalism, as shown in Figure 11.2. Pragmatic, progressive capitalism adopts the principle of setting strict bans in some dimensions because it recognizes the impossibility of effectively policing the harmful behaviors that are highly likely to develop under the market's perverse incentives. In the remainder of the privacy space, it seeks rules that orient market behavior in a procompetitive and socially responsible direction.

CONCLUSION: A PRAGMATIC, PROGRESSIVE APPROACH TO OVERSIGHT

The discussion of the limitations of simple extreme approaches and the earlier discussion of privacy and data point to a broader formulation of how pragmatic progressive oversight can work to prevent abuse, while continuing to rely on competition in markets, which is at the heart of pragmatic progressive capitalism, as shown in Figure 11.2. It adopts the principle of setting strict bans in some dimensions because it simply impossible to effectively police the behaviors that are highly likely to develop given the perverse incentives. In the remainder of the space, it seeks rule that orient market behavior in a procompetitive and socially responsible direction.

FIGURE 11.2: A BROAD APPROACH TO CHOOSING "BANS" VERSUS "REGULATION" FOR GUARDRAILS AND GUIDANCE TO DIRECT MARKET BEHAVIOR

Market Structure/
Basic Conditions
Including
New digital &
Lax traditionnel



Conduct that facilitates abuse of market power
in the digital communications sector
Including consumer and producer behaviors

I use two axes drawn from the Structure-Conduct-Performance paradigm. On the X-axis is conduct by consumers and producers that facilitates the abuse of market power. On the Y-axis are basic conditions and market structures that are conducive to the abuse of market power. The goal is to establish policies that limit restrict the tendency toward abuse. There are red zones, where simple bans may be needed and then a large area where rules are adopted that require specific behaviors. I have not filled these in because the goals, where to draw the lines and what the content of the specific rules should be will vary from sector to sector.

In the case of network neutrality, mention in Chapter 10, we have long experience with the necessary rules to promote competition. While I analyze these at great length in another paper, it is clear that the remedy is focused on the supply side conditions, structures and conduct of the incumbents. In privacy space discussed above, we have had a lively debate for a decade and a half about what is needed. The bans are well established. Interestingly the conditions that are proposed for the remainder of the privacy space have broader applicability. Fair information practices and effective consumer choice are necessary to have a workably competitive market. The structural conditions that would level the playing field for entry are additional and need to be addressed.

Congress has been hesitant to draw the hard lines and, certainly in the case of the communications regulator, it has allowed a great deal of flexibility. As a result, practice has evolved along a common-law-like path that reflects the technologies being used, although there are examples where the agency rule contradicted and distorted the direction of change. Size limitations, structural separations, banning specific practices, and the extent of regulation, are all important policy questions that have gained currency and can be addressed in legislation, without drawing lines.

For example, traffic blocking, slowing and paid prioritization are seen as anticompetitive practices that are widely criticized. Free market fundamentalist believe they can be controlled by statements of principles backed up by self-regulation, transparency and weak oversight by the FTC. History suggests this will not be effective and it will not achieve the same effect as an explicit rule that bans the practices. Similarly, antitrust had specific thresholds for concern about market power abuse in highly concentrated markets, (30% for the abuse of buyer market power (monopsony, 65% for seller market power, the equivalent of 4 to 6 firms in all markets, concerns about vertical integration). The problem was not in the thresholds or identification of issues, it was in the failure of antitrust authorities to enforce these thresholds or the courts to embrace them.

The solution is for Congress to make clearer statements of goals. In the past most agency portfolios did not include promoting competition and innovation, which should be added to the more common goals for consumer protection and universal service. Specific findings about what contributes to or frustrates the achievement of those goals in legislation could constrain agency discretion. Bans on specific practices and hard thresholds may be necessary, but ultimately agency expertise, based on analysis of real-world performance, should be allowed to operate and arrive at these conclusions.

THE STIGLER RECOMMENDATIONS

Having dissected the Stigler analysis, it would be a significant oversight if the analysis did not note the very strong agreement with the analysis in this conclusion. With one important exception, the introduction to the Stigler report is similar to the analysis in this Part.

It begins with a summary of key findings on the structure and conduct of big data platforms, emphasizing that consumers pay for the pieces of the bundle that may appear to have a zero price. They pay indirectly in cash and in kind. Moe importantly, they lose a great deal from the reduced competition that bundling, data exploitation and increased switching costs cause. All of the negative effects of market power (resulting from higher concentration and more vertical integration) are identified in the Stigler introduction: higher (though indirect) cost, lower quality, less innovation. There is no chance that the market will self-correct due to the structural conditions in the sector and the powerful incentives that platforms have to defend, increase and exploit their market power. The economic problem becomes a much larger social problem because of externalities, like loss of privacy, reduced production of news and distortion of political discourse. "This concentration of economic, media, data, and political power is potentially dangerous for our democracies."[184]

The recommendations offered include interoperability, aggressive antitrust, transparency, and an independent regulator, designed to avoid capture. There is a sensitivity to the unique conditions that may "normally" be benign market behaviors but become anticompetitive and ante-consumer in the hand of dominant, big data platforms.

> Exclusive dealings and loyalty discounts, which are common in most markets, deserve much closer antitrust scrutiny in DP [digital platform] markets because these markets have a natural tendency to monopolization: Many practices that are benign in other markets could easily become the straw that breaks the camel's back in DP markets.[185]

I am not convinced that exclusive dealing, whether or not it is common, is very benign. It has been given an undeserved "free pass" by free market fundamentalism. I do agree that they are a particular concern in the presence of big data platforms.

On the other hand, the proposal aims to encourage experimentation and maintain the ability of the states to try other approaches. These are two characteristics that were central to the Brandeis Protocol. Careful, timely analysis of real-world data is the cornerstone of many aspects of the effort to prevent abuse.

The proposed remedy also includes a novel approach to make the rule more responsive to consumer needs.

> The adoption of "consumertarian default rules"; that is, default rules on data protection that follow the preferences of a majority of US consumers. Such defaults should be based on "the results of well-designed, scientifically rigorous studies that elicit consumer preferences, opt-out costs, and knowledge of the rules and alternatives, as well as ignorance and biases of such rules' potential costs and benefits." These default rules should also be revisited periodically to account for updates in consumers' preferences due to technological changes or better education.[186]

I think this process begins to look a lot like the participatory governance described above. The intense study it advocates should certainly be part of the participatory governance process.

The proposal involves a great deal of differentiation. There are different levels of protection for different types of data, different approaches to writing rules, and different paths for firms to come in compliance with rules.

> An interesting alternative may be for some authorities to establish a safe harbor for companies that pre-commit in advance to the result of product-specific studies, which must be periodically rerun. If a company fails to qualify for the safe harbor,

> it is exposed to additional legal liability in litigation if a plaintiff can prove that the default fails the "consumertarian" standard. Finally, federal regulation should be a floor—states should be free to establish different, more protective requirements as they deem appropriate.[187]

Finally, "if all else fails" the authors argue that society should consider "the imposition of an additional fiduciary duty on the boards of monopolies: a fiduciary duty towards society." This is essentially the common new law duty to take care.[188]

All of these measures are pragmatic and progressive, intended to make competition, markets and capitalism work better. The one area where I disagree strongly is the suggestion that the FTC can take on much of this regulatory oversight. The institutional nature and past behavior of the FTC discussed above indicates strongly that it is not up to the job. We need a new regulatory agency designed to deal with big data platforms.

BIBLIOGRAPHY

Acemoglu, Daron, and James A. Robinson,	2012	*Why Nations Fail: The Origins of Power, Prosperity, and Poverty,* (Crown Publishers), 2012.
Acemoglu, Daron, and James A. Robinson,	2015	"The Rise and Decline of General Laws of Capitalism." *Journal of Economic Perspectives***,** 29 (2015): 3–28.
Anderson, Elizabeth,	2005	"How Not to Complain about Taxes (III): 'I Deserve My Pretax Income.'" *Left2Right*, January 26, 2005.
Antitrust Experts,	2020	*Letter to the House Antitrust Committee,* April 30.
Balcerowicz, Leszek and Marek Radzikowski,	2018	"The Case for a Targeted Criticism of the Welfare State," *Cato Journal*, Vol. 38, No. 1.
Baker, Johnathan	2012	"Exclusion as a Core Competition Concern." 78 *Antitrust L.J.*
Berget, et al.,	2008	"Analyzing the functional dynamics of technological innovation systems: A scheme of analysis," *Research Policy*
Berk, Gerald,	2009	*Regulated Competition* (Cambridge).
Blackstone, William, Commentaries,	2002	cited in James B. Speta, A Common Carrier Approach to Internet Interconnection, 54 *Fed. Comm. L. J.*
Brandeis, Louis	1905	*The Opportunity in the Law* (Louis D. Brandeis School of Law Library, 1905).
Brandeis, Louis	1912	in Osmond K. Fraenkel (ed.), *The Curse of Bigness: Miscellaneous Papers of Louis D. Brande*is, (1935)
Brandeis, Louis	1914	*The Regulation of Competition Versus the Regulation of Monopoly, An address to the Economic Club of New York on November 1, 1912*
Brandeis, Louis	1914	*Other People's Money – and How the Bankers Use it,* (Louis D. Brandeis School of Law Library, 1914
Brandeis, Louis	1914	*Business, A Profession* (Louis D. Brandeis School of Law Library, 1914)
Brandeis, Louis	1922	*The Document.*
Burtraw, Dallas, and Matt Woerman.	2013	"Economic Ideas for a Complex Climate Policy Regime," *Energy Economics*, 40.
Cadman, Richard and Chris Dineen,	2008	*Price and Income Elasticity of Demand for Broadband Subscriptions: A Cross-Sectional Model of OECD Countries*, SSN 0085-7130 ©Telenor ASA 2009
Chandler, Alfred,	1977	*The Visible Hand: The Managerial Revolution in American Busines*s (Belnap)
Cohen, Wesley M.	2010	"Fifty Years of Empirical Studies of Innovative Activity and Performance." In *Handbooks of the Economics of Innovation (*Volume 1). Edited by Bronwyn H. Hall and Nathan Rosenberg, (North-Holland).
Cooper Mark,	2000	"Progressive, Democratic Capitalism in The Digital Age," *21st Century Technology and 20th Century Law: Where Do We Go from Here?", The Fund for Constitutional Government, Conference on Media, Democracy and the Constitution,* September 27.
Cooper Mark,	2005	"Restoring the Balance of Public Values and Private Incentive in American Capitalism," Natural Gas & Electricity, June 2005,
Cooper, Mark	2013	Why Growing Up is Hard to Do: Institutional Challenges for Internet Governance in the 'Quarter Life Crisis' of the Digital Revolution." *Journal on Telecommunications and High Technology Law.*

Cooper, Mark, 2002 "Restoring the Balance of Public Values and Private Incentives in American Capitalism," Too Much Deregulation or Not Enough, *Cato Institution*, November 1.

Cooper, Mark, 2012 American Federalism at Its Best: Why the Environmental Protection Agency Should Grant A Clean Air Act Waiver to California For Its Advanced Clean Cars Program," *Environmental Protection Agency*, September 19.

Cooper, Mark, 2015 e ICT Revolution in Historical Perspective: Progressive Capitalism as a Response to Free Market Fanaticism and Marxist Complaints in the Deployment Phase of the Digital Mode of Production." *Telecommunication Policy Research Conference Session on Innovation*, September 28.

Cooper, Mark, 2020 *The Political Economy of Pandemic Policy*, Institute for Energy and the Environment, Vermont Law School, July.

Cooper, Mark, 2011a "Prudent Resource Acquisition in a Complex Decision-Making Environment: Multidimensional Analysis Highlights the Superiority of Efficiency,*" Current Approaches to Integrated Resource Planning*, ACEEE.

Cooper, Mark, 2016a "Renewable and distributed resources in a post-Paris low carbon future: The key role and political economy of sustainable electricity," *Energy Research & Social Science.*

Cooper, Mark, 2009 "The Failure of Market Fundamentalism: What Are the Issues in The ICT Sector?" *The New Economics of ICT: Implications of Post-Neoclassical Economics for the Information Communications Technology Sector, Columbia University,* March 20.

Cooper, Mark, 2011b "The Central Role of Wireless in the 21st Century Communications Ecology: Adapting Spectrum and Universal Service Policy to the New Reality," *Telecommunications Policy Research Conference*, September.

Cooper, Mark, 2011c "Crowd Sourcing Enforcement: Building a Platform for Participatory Regulation in the Digital Information Age," presentation at *The Digital Broadband Migration: The Dynamics of Disruptive Innovation*, *Silicon Flatirons Ctr*. Feb. 12, 2011

Cooper, Mark, 2011d "Structured Viral Communications: The Political Economy and Social Organization of Digital Disintermediation," *Journal on High Telecommunications and High Technology Law,* 9:1.

Cooper, Mark, 2011e "The Future of Journalism: Addressing Pervasive Market Failure with Public Policy," in R.W. McChesney and Victor Picard (eds.), Will the Last Reporter Turn out the Lights (New Press).

Cooper, Mark, 2016b "Energy Justice in Theory and Practice: Building a Pragmatic Progressive Road Map," in This, Van de Graaf, et al. (Eds)**,** *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave/MacMillan, 2016)). .

Cooper, Mark, 2017a $2 Trillion Mistake: Abandoning Four Decades of Energy Performance Standards that Save Consumers Money, Grow the Economy and Protect Public Health and the Environment A Comprehensive, Benefit-Cost Review of the "Command-But-Not-Control" Approach Applied to Light and Heavy-Duty Vehicles and Household Appliances, Attachment to Comments of the Consumer Federation Of America, before the Department of Transportation Re: Notification of Regulatory Review, November 1.

Cooper, Mark, 2017b *The Political Economy of Electricity: Progressive Capitalism and the Struggle to Build a Sustainable Power Sector* (Praeger).

Cooper, Mark, 2018 "Governing the Global Climate Commons: The Political Economy of State and Local Action, After the U.S. Flip-Flop on the Paris Agreement," *Energy Policy.*

Cooper, Mark, 2014a Energy Efficiency Performance Standards: Driving Consumer and Energy Savings in California, *California Energy Commission's Energy Academy*, February 20.

Cooper, Mark 2003 *Applying the Structure, Conduct Performance Paradigm of Industrial Organization to the Forum for Democratic Discourse," Media Diversity and Localism, Meaning, Metrics and Public Interest, Donald* McGannon Communications Research Center, Fordham University, December.

Cooper, Mark, 2004 "Making the Network Connection." In Open Architecture as Communications Policy. Edited by Mark Cooper, 95–154. Stanford, CA: *Center for Internet and Society at Stanford Law School.*

Cooper, Mark,	2006a	"From Wifi to Wikis and Open Source: The Political Economy of Collaborative Production in the Digital Information Age." *Journal on Telecommunications and High Technology Law* 5.
Cooper, Mark,	2006b	"The Central Role of Network Neutrality in the Internet Revolution," *Public Interest Advocacy Center*, Ottawa Canada, November 24.
Cooper, Mark,	2014b	"The Long History and Increasing Importance of Public Service Principles For 21st Century Public Digital Communications Networks." Journal on Telecommunications and High Technology Law, 12.
Dewenter, Ralf & Haucap, Justus,	2004	*Estimating Demand Elasticities for Mobile Telecommunications in Austria*, Working Paper 33/2004, Helmut Schmidt University, Hamburg.
Douek, Evelyn	2020	*The Rise of Content Cartels.*
Duménil, G. and D. Lévy,	2016	*The Historical Trends of Technology and Distribution in the U.S. Economy. Data and figures (since 1869)."*
Einer Erlhauge,	2009	*Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, Harvard John M. Olin Discussion Paper Series, October 16.
Ericsson, Arthur D. Little, and Chalmers University,	2012	Socioeconomic Effects of Broadband Speed, September 2013.
Federal Communications Commission,	1971	First Computer Inquiry, Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Service Facilities: Notice of Proposed Rulemaking and Tentative Decision, 28 F.C.C.2d 291 (1970), Final Decision and Order, 28 F.C.C.2d 267 (1971), aff'd in part sub nom. GTE Serv. Corp. v. FCC, 474 F.2d 724 (2d Cir. 1973) (full-text), decision on remand, Order, 40 F.C.C.2d 293 (1973).
Federal Communications Commission,	1980	1980, Second Computer Inquiry, Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry): Tentative Decision, 72 F.C.C.2d 358 (1979), Final Decision, 77 F.C.C.2d 384 (1980), reconsideration, Memorandum Opinion and Order 84 F.C.C.2d 50 (1981), further reconsideration ,Order on Further Reconsideration, 88 F.C.C.2d 512 (1981), aff'd sub nom. Computer and Comms. Indus. Ass'n. v. Federal Comm'ns Comm'n, 693 F.2d 198 (D.C. Cir. 1982) (full-text), cert. denied, 461 U.S. 938 (1983), aff'd on second further reconsideration, Memorandum Opinion and Order, 56 Rad. Reg. 2d (P&F) 301 (1984).
Federal Communications Commission,	1986	Third Computer Inquiry, Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry): Report & Order, 104 F.C.C.2d 958, 1986 WL 292006 (1986), reconsideration, Phase I Reconsideration Order, 2 F.C.C.R. 3035, 1987 WL 345279 (1987), further reconsideration, Order on Further Reconsideration, 3 F.C.C.R. 1135, 1988 WL 487742 (1988), second further reconsideration, Order on Second Further Reconsideration, 4 F.C.C.R. 5927, 1989 WL 512561 (1989), Report & Order and Phase I Reconsideration Order, vacated sub nom. California v. F.C.C., 905 F.2d 1217 (9th Cir. 1990), decision on remand, Computer III Remand Proceedings: Report and Order, 5 F.C.C.R. 7719, 1990 WL 603216 (1990).
Federal Communication Commission,	2010	2010, Connecting America: The National Broadband Plan.
Federal Reserve Bank of St. Louis	Database,	Civilian Unemployment Rate, Percent, Annual, Seasonally Adjusted
Federal Trade Commission (FTC),	1977	*1997 Announces Two Significant Efforts in Its Comprehensive Examination of Consumer Privacy* (March 4 1997), http://www.ftc.gov/opa/1997/03/conspriv.shtm.

Federal Trade Commission (FTC), 1988 1998 Privacy Online: A Report to Congress (June 1998), at 41, http://www.ftc.gov/reports/privacy3/priv-23a.pdf.

Federal Trade Commission (FTC), 1999 1999 Press Release, FTC and Commerce Dept. to Hold Public Workshop on Online Privacy (September 15, 1999),http://www.ftc.gov/opa/1999/09/profiling.shtm.

Federal Trade Commission (FTC), 2008 2008 Protecting Consumers in the Next Tech-ade: A Report by the Staff of the Federal Trade Commission (March 2008), http://www.ftc.gov/os/2008/03/P064101tech.pdf.

Federal Trade Commission (FTC), 2009 2009 Staff Report, Self-Regulatory Principles For Online Behavioral Advertising, Behavioral Advertising Tracking, Targeting, & Technology (February 2009), at 32, http://www.ftc.gov/os/2009/02/P085400behavadreport.pdf.

Federal Trade Commission (FTC), 2010 2010 Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers (December 1, 2010), http://www.ftc.gov/os/2010/12/101201privacyreport.pdf.

Federal Trade Commission (FTC), 2000a 2000 Privacy Online: Fair Information Practices in the Electronic Marketplace (May 2000),http://www.ftc.gov/reports/privacy2000/privacy2000.pdf.

Federal Trade Commission (FTC), 2000b 2000 Online Profiling: A Report To Congress, Part 2 Recommendations (July 2000), at 10,http://www.ftc.gov/os/2000/07/onlineprofiling.pdf.

Federal Trade Commission (FTC), 2007a Town Hall, Ehavioral Advertising: Tracking, Targeting, and Technology,http://www.ftc.gov/bcp/workshops/ehavioral/index.shtml.

Federal Trade Commission (FTC), 2007b *To Examine Consumer Tracking Practices Used by Online Ad Industry*, 6 PVLR 1275 (2007).

Federal Trade Commission (FTC), 2007c 2007 Online Behavioral Advertising Moving the Discussion Forward to Possible Self-Regulatory Principles(December 2007), http://www.ftc.gov/os/2007/12/P859900stmt.pdf.

Fonseca, Miguel A. and Hans-Theo Norman, 2014 “Endogenous cartel formation: Experimental evidence,” *Economics Letters* 125.

Gigerenzer and Gaissmaier, 2011 "Heuristic Decision Making", *Annual Review of Psychology,*

Glick, Mark, 2019 “Antitrust and Economic History: The Historic Failure of the Chicago School of Antitrust,” *Institute for New Economic Thinking*, Working Paper No. 95, May.

Goodman, Ellen, 2020 Digital Information: Fidelity and Friction, Knight First Amendment Institute at Columbia University.

Gowdy, John, 2003 “Contemporary Welfare Economics and Ecological Economics Valuation and Policy,” Internet Encyclopedia of Ecological Economics, *International Society for Ecological Economic*s, February.

Gregory, Paul R., “How Socialist if Bernie Sanders?” 2019 Hoover Institution Journal, May 2.

Grewal David Singhand Jedediah Purdy, 2014 “Introduction: Law and Neoliberalism,” *Law and Contemporary Problems* 77.

Hammond, Samuel, 2018 *The Free-Market Welfare State: Preserving dynamism in a volatile world,* Niskanen Center, May 1.

Hawley, Ellis E. 1996 *The New Deal and the Problem of Monopoly: A Study in Economic Ambivalence* (Princeton, University Press) (hereafter, Ambivalence)

Hekkert, M.P. et al.,	2007	“Functions of innovation systems; A new approach for analyzing technological change,” *Technological Forecasting & Social Change.*
Hockett v. State, 5 N.E. 178 (Ind. 1886)	1886	cited in James B. Speta, A Common Carrier Approach to Internet Interconnection, 54 FED. COMM. L. J.
Hodgson, Geoffrey M.,	2007	"Evolutionary and Institutional Economics as the New Mainstream?” *Evolutionary and Institutional Economics Review* 4.
Hodgson, Geoffrey M.,	2009	“Institutional Economics into the Twenty-First Century,” *Studi e Note di Economia* 14.
International Telecommunications Union,	2013	Impact of Broadband on the Economy, April.
Kahn, Alfred E.,	1988	*The Economics of Regulation: Principles and Institutions.* Cambridge, MA: MIT Press
Kimmelman, Gene,	2019	The Right Way to Regulate Digital Platforms, Shorenstein Center: September 18.
Kimmelman, Gene,	2020	Key Elements and Functions of a New Digital Regulatory Agency, February 12, 2020, Shorenstein Center.
Kip Viscusi, John M. Vernon, and Joseph E. Harrington, Jr.,	2000	*Economics of Regulation and Antitrust* (Cambridge: MIT Press).
Kobayashi, Bruce H.,	2005	“Does Economics Provide a Reliable Guide to Regulating Commodity Bundling by Firms? A Survey of the Economic Literature,” *Journal of Competition Law & Economics*, 1.
Krugman, Paul,	2020	“Bernie Sanders Isn’t a Socialist,” New York Times, February 13.
Kwoka, John,	2015	Mergers, Merger Control, and Remedies (MIT Press).
Lawson, Tony,	2009	“The Current Economic Crisis: Its Nature and the Course of Academic Economics,” *Cambridge Journal of Economics*, 33.
Lemon, Jason,	2020	, “Bernie Sanders is a Democratic Socialist, Not a Communist, Here’s the Difference, U.S. *News*, February 3.
Martins, Nuno Ornelas,	2013	“The Capability Approach as a Human Development Paradigm and Its Critiques.” Encyclopedia of Life Support Systems (EOLSS), Developed under the Auspices of the UNESCO. Paris, France, Eolss Publishers.
Martins, Nuno Ornelas.	2009	“Sen’s Capability Approach and Post Keynesianism: Similarities, Distinctions, and the Cambridge Tradition.” *Journal of Post Keynesian Economics*. 31.
Martins, Nuno Ornelas.	2014	Inequality, Sustainability and Piketty’s Capital. *Catholic University of Portugal, Economic Working Papers*.
Mason, Adolphus	1945	*A Free Man’s Life* (Viking).
McCabe, David	2020	“She Wants to Break Up Big Everything,” *New York Times*, February 12.
Moore, Stephen and Julian L. Simon,	1999	"The Greatest Century That Ever Was 25 Miraculous Trends of the Past 100 Years," *Cato Institute Policy Analysis,* No 364, December 15.
Orbach, Barak,	2015	“A State of Inaction: Regulatory Preferences, Rent, and Income Inequality,” *Theoretical Inquiries in Law*, 16;
O'Reilly, Andrew,	2020	Democratic Socialists of America won't endorse Biden's White House bid, *Fox News*, April 12.
Pearce, David W.,	1984	*The MIT Dictionary of Modern Economics, (*Cambridge, MA: MIT Press).
Pérez, Carlota,	2006	“Re-Specialization and the Deployment of the ICT Paradigm: An Essay on the Present Challenges of Globalization,” in T*he Future of the Information Society in Europe: Contributions to the Debate*. Edited by R. Compañó, C. Pascu, A. Bianchi,

J. C. Burgelman, S. Barrios, M. Ulbrich, and I. Maghiros, 33–66. Technical Report EUR 22353 EN, Institute for Prospective Technological Studies.

Perez, Carlota, 2002 *Technology Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages.* Northampton, MA: Elgar Publishing,

Philippon, Thomas, 2014 *Has the U.S. Finance Industry Become Less Efficient? On the Theory and Measurement of Financial Intermediation, September.*

Piketty, Thomann and Emmanuel Saez 2004 Income Inequality in the United States, 1913-2002, November.

Piketty, Thomas 2014 *Capitalism in the Twenty-First Century* (Belnap).

Pitofsky, Robert 2008 *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford).

Pradhan et al., 2014 "Economic Growth and the Development of Telecommunications Infrastructure in the G-20 Countries: A Panel-VAR Approach," *Telecommunications Policy* 38.

Purcell: Edward A., Jr., 2000 The Progressive Constitution: Erie, the Judicial Power and the Politics of the Federal Courts in the Twentieth-Century (Yale).

Rahman, K. Sabeel and Zephyr Teachout, 2020 *From Private Bads to Public Goods,* Knight First Amendment Institute at Columbia University.

Rajan Raghuram G, and Luigi Zingales, 2003 *Saving Capitalism from the Capitalists* (Crown).

Randal D. Heeb, et. al., 2009 "Cartels as Two–Stage Mechanisms: Implications for the Analysis of Dominant-Firm Conduct," 19 *Chi. J. Int'L L.* 19.

Rodini, Ward and Woroch, 2003 *Going Mobile: Substitutability between Fixed and Mobile Access, SSRN.*

Sagi, Guy, 2014 "A Comprehensive Economic and Legal Analysis of Tying Arrangements," *Seattle University Law Review.*

Sallet, Jonathan, 2018 Louis Brandeis: A Man for This Season, *Colorado Technology Law Review,* 16:2

Sarkar, Jayati. 1998 "Technological Diffusion: Alternative Theories and Historical Evidence." *Journal of Economic Surveys* 12.

Scherer, Frederic M., and David Ross. 1990 *Industrial Market Structure and Economic Performance* (3rd ed.). (Houghton Mifflin}.

Schlesinger, Arthur, M., Jr., 1960 1960, *The Age of Roosevelt: The Politics of Upheava*l (Riverside).

Shepherd, William G. 1984 "'Contestability' vs. competition," *American Economic Review* 74(4), September;

Shepherd, William G. 1989 "Entry barriers, contestability, and predatory pricing," *Revue d'Economie Industrielle,* 46(4);

Shepherd, William G., 1985 *The Economics of Industrial Organization* (Englewood Cliffs, NJ: Prentice Hall, 2nd ed., 1985),

Singh, Satsinder, Michael Utton and Michael Waterson, 1998 Strategic Behaviour of Incumbent Firms in the UK, *International Journal of Industrial Organization,* Volume 16, Issue 2, 1 March.

Soete, Luc, Bart Verspagen and Bas Ter Weel, 2010 "Systems of Innovation," *Handbooks in Economics,* Volume 1 (North Holland).

Solow, Robert, 1987 "We'd better watch out," *New York Times Book Review,* July 12, 1987.

Stigler Center Committee for the Study of Digital Platforms,	2019	"Market Structure and Antitrust Subcommittee Report," *George Stigler Center for the Study of the Economic and the State*, The University of Chicago Booth School of Business, Draft, May 15.
Stiglitz, Joseph	1989	*The Economic Role of the State,* Arnold Heertje, (Ed.) (Basil Blackwell)
Stiglitz, Joseph	1994	*Wither Socialism* (MIT Press).
Stiglitz, Joseph	2003	*The Roaring Nineties: A New History of the World's Most Prosperous Decade* (Norton)
Stiglitz, Joseph	2014	" Phony Capitalism," *Harpers,* September.
Stiglitz, Joseph	2018	War of Word, Capitalism v. Socialism, *New York Times,* April 20.
Stiglitz, Joseph	2019	*People, Power and Profits* (Norton).
Stiglitz, Joseph E.,	2010	*Freefall: America, Free Markets, and the Sinking of the World Economy* (Norton)
Sullivan, Lawrence Anthony,	1979	"Justice" And Other Non-Economic Goals of Antitrust," *University of Pennsylvania Law Review*.
Taylor, Lester D.,	1994	*Telecommunications Demand in Theory and Practic*e (Kluwer, Academic Publishers).
UK Competition and Markets Administration,	2019	*Online Platforms and Digital Advertising.*
United States v. AT&T, T-Mobile, and Deutsche,	2010	August.
Urofsky, Melvin I.,	2009	*Louis D. Brandeis: A Lif*e (Pantheon).
Von Hipple, Eric,	2005	Democratizing Innovation.
Washington Post,	2020	Editorial, July 30.
Weiss, Kai	2018	*No Such Thing as a Free-Market Welfare State*, Foundation for Economic Education
Wheeler, Thomas, Phil Verveer and Gene Kimmleman,	2020	*New Digital Realities; New Oversight Solutions, Statutes and Regulatory Models Adopted for the Industrial Era are Insufficient for the Realities of the Internet Era, The Case for a Digital Platform Agency and a New Approach to Regulatory Oversight,* Shorenstein Center
Wu, Timothy	2019	*The Curse of Bigness,* Columbia Global Reports.
Zingales, Luigi and Filippo Maria Lancieri,	2020	Stigler Committee on Digital Platforms: *Policy Brief*.
Zingales, Luigi,	2012	*A Capitalism for the People: Recapturing the Lost Genius of American Prosperit*y (Basic).
Zucman, Gabriel	2019	Global Wealth Inequality, National Bureau of Economic Research, Working Paper 25462, January.

ENDNOTES

[1] *Washington Post*, Editorial, July 30.
[2] Id.
[3] Antitrust Experts, 2020.
[4] I use the term free market fundamentalism to highlight an inconsistency in the simple concept free market fundamentalism. Some advocates of the market fundamentalist have argued that a welfare state must be attached to the free market to meet key failures of the market, which others reject the idea (See Hammond, 2018, supporting the concept and Balcerowicz and Radzikowski, 2018, Kai, 2018, opposing or offering strong caveats about its use.
[5] For early formulation see, Cooper 2000, 2002, 2005. For recent formulations see Cooper 2017, 2000.
[6] Cooper, 2004, 2006a, 2006b, 2011b, 2011c, 2011d, 2013.
[7] Cooper, 2009, 2014b, 2015.
[8] Cooper, 2003, 2011e.
[9] Cooper, 2012, 2014a, 2017a.
[10] Cooper, 2011a, 2016a, 2017.
[11] Cooper, 2018.
[12] Cooper, 2020.
[13] Cooper and Roper, 2009.
[14] I use Alfred Kahn's (1988) justification of regulation.
[15] Stiglitz, 2019.
[16] I believe that building the bridge is important for the purpose of reintroducing the political economy to the electorate. If mobilizing the intellectual consistency and the historical record of success is important, as I do, it is unfortunate that Stiglitz does not mention Brandies once in the books cited in this paper.
[17] Stiglitz, 2014.
[18] Stiglitz, (2015) has launched an effort to focus the economic policy debate in the 2020 election on the American approach to progressive capitalism, with an emphasis on the word "capitalism." A list of 150 of Stiglitz's publications over almost 40 years, shows 8 uses of the word capitalism or capitalist. All are 2008, after the great recession. Five are in 2019 and the only three uses of the term progressive capitalism are associated with his most recent book (Joseph Stiglitz. 2019, *People, Power and Profits* (Norton) (hereafter, Stiglitz, *2019*)).
[19] Candidates running for president for explicitly leftist parties (socialist or communist) never got more than 6% of the popular vote and never more than 3% of electoral college vote. Teddy Roosevelt, a Republican incumbent, ran on the progressive line in 1912 and got 34%, far more than the Republican (Taft at 23%), but he lost to the Democrat, Wilson (with 43%). The electoral vote was a landslidefor Wilson (82%), although the Progressives swamped the Republicans (17% to 2%).
[20] The term neo-Brandeisians has been used (e.g. Schlisinger, 1960) to describe the central role of Brandeis and his disciples in the New Deal. "The Curse of Bigness" animated the resistance by Brandeis to the extreme centralization of the first New Deal. The Second New Deal, built by his disciples, enjoyed much greater approval from Brandeis.
[21] Stiglitz (2015) has launched an effort to focus the economic policy debate in the 2020 election on the American approach to progressive capitalism, with an emphasis on the word "capitalism." A list of 150 of Stiglitz's publications over almost 40 years, shows 8 uses of the word capitalism or capitalist. All are 2008, after the great recession. Five are in 2019 and the only three uses of the term progressive capitalism are associated with his most recent book, Stiglitz, 2019).
[22] Hawley, 1996.
[23] Stiglitz, 2014.
[24] Both Urofsky, *2009*, pp. 243-253, and Mason, 1945, (pp. 289-315) devote considerable attention to the activity, the former in a Chapter on "Industrial Democracy," the latter in a Chapter entitled "Democracy in the Garment Trades.)
[25] Brandeis change in other areas
[26] Pérez, 2002, uses turning point; Acemoglu and Robinson, 2015, use critical juncture.
[27] Anderson, 2005, 2–3.
[28] Ibid.
[29] For example. Schlesinger, 1960.
[30] Urofsky, 2009, pp. 707-711.
[31] Louis Brandeis, *Business, A Profession* (Louis D. Brandeis School of Law Library, 1914) (hereafter, Brandeis *Profession)*, p. 7, page numbers are from individual pieces, captured as text in Times New Roman, 12 point.
[32] Id., p. 13.
[33] Louis Brandeis, *The Living Law* (Louis D. Brandeis School of Law Library, 1905) (hereafter, Brandeis, *Living)*, p. 2.
[34] Id., p. 7.
[35] Louis Brandeis, *The Opportunity in the Law* (Louis D. Brandeis School of Law Library, 1905), (hereafter, Brandeis *Opportunity)* p. 3.
[36] Id., p. 5.
[37] Brandeis *Living*, p. 5.
[38] Berk, 2009, p.2
[39] Urofsky, 2009, pp. 703-706, and Mason, 1945, describe 620-622 these decisions.
[40] Id., p. 705.
[41] Id., p. 705.
[42] Id., p. 704.
[43] Mason, 1945, p. 619.
[44] Id., p. 703.
[45] Id., p.704.
[46] Mason, 1945, p. 621.
[47] Urofsky, 2009, p. 706
[48] Id., pp. 707-711. Mason, 1945, pp. 620-622, does the same.
[49] Mason, 1945, p. 619.
[50] Hawley, 1996, p. 402, which of course means the spirit of Brandeis was participating on the side of Wilson.

[51] Id., p.423.
[52] Id., pp.424-425.
[53] Id., pp. 425-426.
[54] Id., p. 429.
[55] Id.
[56] Brandeis *Regulated* opens with a celebration of the Sherman Act, which had taken two decades to break up the oil trust.
[57] Hawley, p. 425
[58] Id., p. 428
[59] Id., p. 463.
[60] Id., p. 463.
[61] Id., p. 441
[62] Hawley,1996.
[63] Id., p. 476.
[64] Id., p. 494.
[65] Pearce, 1984, 342.
[66] Piketty, 2014, p. 574.
[67] The term was used explicitly in late 1998, although the ideas underlying the concept were criticized somewhat earlier. Stiglitz used it in his Nobel lecture in 2001 Information and the Change in the Paradigm in Economics, December 8, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2001/stiglitz-lecture.pdf
[68] Urofsky, 2009; Mason, 1945.
[69] Stiglitz, 2019.
[70] Stiglitz, 2019.
[71] Hawley, *1996,* on Thurmond Arnold, Wu, 2019.
[72] In the past I have used the word evolutionary, but at the end of *Socialism,* Stiglitz argues that it raises the specter of social Darwinism, which should be avoided in this debate. Therefore, it is safe to say that the political economy of progressive capitalism is emergent and adaptive.
[73] I reserve his discussion of *Wither Socialism,* the only other book that names a political economy in the title, for Chapter 5. These two works were published before Stiglitz received the Nobel Prize, arguably the highest honor in the profession. (Note that the cites from Brandeis also mainly come from a period before he achieved what is generally considered the highest honor of *his* profession – appointment to the Supreme Court.)
[74] Moore and Simon, 1999.
[75] Stiglitz, 1994, p. 21.
[76] Id., p. 21.
[77] Id., p. 22.
[78] Stiglitz makes a passing reference to structure, conduct and performance in assessing political eocnomies, p. xx
[79] See Shepherd, 19xx and Viscusi, xxx
[80] Scherer and Ross, 1990, p. 4.
[81] Id., p. 18,
[82] Id.
[83] With the emphasis on the impersonal process of competitive markets and freedom to choose, competitive economic markets are also preferred, because they provide a strong basis for democratic political systems.
[84] In addition to the Nobel laureates above, see the discussion of antitrust at the end of this section.
[85] Stiglitz, 1994, 2019.
[86] Cooper, 2017, Standards that define a long-term goal but are company, technology, and product neutral while maximizing consumer choice are most likely to stimulate innovation and competition and lead to the least-cost result. Long-term standards that promote consumer choice create the opportunity to meet consumer needs.
[87] Soete, Verspagen and Weel, 2010.
[88] Hekkert, et al., 2007, p. 426.
[89] Soete, Verspagen and Weel, pp. 1163…1177). the innovation systems literature has led to five main insights: the importance of a broader set of innovation inputs than just R&D, the importance of institutions and organizations, the role of interactive learning, leading to a dynamic perspective rather than a static allocative one, the role of interaction between agents, and, finally, the role of social capital. Each one of those specific points opens up links with literatures and approaches that are not so common in (mainstream) economics.
[90] Sarkar, 1998, p. 132.
[91] In addition to Sarkar, who presents a review focused on diffusion theory. See the following for the broader comparison, a number of sources are important: Martins, 2013, 2009; Lawson, "(2009); Grewal and Purdy, 2003; Hodgson, 2007, 2009); Geoffrey M. Hodgson, Dequech, 2007.
[92] Gigerenzer and Gaissmaier, 2011, p. 453.
[93] Acemoglu and Robinson, *Why Nations Fail*, 74. "Inclusive Institutions . . . are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and then enable individuals to make the choices they wish. To be inclusive, economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract; it also must permit the entry of new business and allow people to choose their careers."
[94] Ibid., 43.
[95] Ibid., 75. Secure property rights, the law, public services, and freedom to contract and exchange all rely on the state, the institution with the coercive capacity to impose order, prevent theft and fraud, and enforce contracts between private parties. To function well, society also needs other public services: roads and a transport network . . . a public infrastructure . . . and some type of basic regulation to prevent fraud and malfeasance
[96] Acemoglu and Robinson, 2015, p.4; Piketty, *Capital*, 10, offers a similar explanation. "[Marx,] [l]ike his predecessors, totally neglected the possibility of durable technological progress and steadily increasing productivity, which is a force that can to some extent serve as a counterweight to the process of accumulation and concentration of private capital. He no doubt lacked the statistical data needed to refine his predictions. He probably suffered as well from having decided on this conclusion in 1845." Although Piketty expresses a great deal of

concern about contemporary capitalism, he does recognize the important of productivity and its role in responding to the tensions that capitalism creates. Piketty argues that Marx did not see this important aspect of capitalism. He probably suffered as well from having decided on this conclusion in 1845." Piketty supposes that Marx's mind about capitalism was incorrectly made up early and the biography of Marx shows a great deal of writing in the period from 1840 to 1850, the frenzied gilded age and bubble of the second phase of the first industrial revolution, which burst in 1848 producing a severe recession. Since Marx wrote, technology, as a driver of productivity has come to be seen as essential to determining the prospects for the economy and the institution of capitalism. (Piketyt 228) The long-term structural growth rate… is the sum of productivity growth and population growth. In Marx's mind, as in the minds of all nineteenth and early twentieth-century economists before Robert Solow did his work on growth in the 1950s, the very idea of structural growth, driven by permanent and durable growth of productivity, was not clearly identified or formulated. In those days, the implicit hypothesis was that growth of production, and especially of manufacturing output, was explained mainly by the accumulation of industrial capital… Today we know that long-term structural growth is possible only because of productivity growth. But this was not obvious in Marx's time, owing to a lack of historical perspective and good data.

[97] Acemoglu and Robinson, p. 74.

[98] Acemoglu and Robinson, p. 74.

[99] Acemoglu and Robinson, p. 75.

[100] Acemoglu and Robinson, p. 43.

[101] Acemoglu and Robinson, p 307.

[102] Acemoglu and Robinson, p. 82.

[103] Pérez, 2006, at 34.

[104] Scherer and Ross, 1990), 5, lists six policies in their depiction of the Structure-Conduct-Performance paradigm. Taxes are listed first, regulation second (followed by two other policies that are clearly regulatory, international trade rules and price controls), antitrust and information provision. Viscusi, Vernon and Harrington, Jr., 2000, p. 3, see "two types of mechanisms . . . to address these departures from the perfectly competitive model . . . a tax on various types of activities . . . try to control behavior directly . . . in the field of antitrust . . . a complex web of regulation."

[105] Glick, 2019, The use of the Chicago School is appropriate for a discussion focused on antitrust law and practice. "The Chicago School assumed that reduced regulation and more permissive antitrust enforcement would unleash a period of big business efficiency, innovation and growth. My paper shows that these predictions were illusory. Instead, the evidence is that economic performance, including growth, productivity, employment, and income equality were superior in the period just before the rise of the Chicago School." In contrast, the "post-Chicago" school of industrial organization, economists who are critical of many of the Chicago School economic tenets, have been careful not to deviate from such core Chicago School concepts as the exceptionally narrow "consumer welfare" goal for antitrust enforcement. "Until the 1970s, neoliberalism was a conservative fringe movement. The Chicago School antitrust scholars were leaders and participants in this movement. In the crisis of the 1970s, neoliberalism managed to replace the New Deal policy regime, and in antitrust circles, the Chicago School rose to prominence." For example, today, the scholars that are part of the New Brandeis School of antitrust that thoroughly reject Chicago School assumptions have been labelled as proponents of "hipster" antitrust, a clear effort to deprive one side in the current antitrust debate of legitimacy.

[106] Stiglitz, 2019.

[107] Glick, 2019.

[108] As discussed in Chapter 3.

[109] Urofsky 2009.

[110] Stiglitz, 2003.

[111] Cooper, 2020.

[112] The term was used explicitly in late 1998, although the ideas underlying the concept were criticized somewhat earlier. Stiglitz used it in his Nobel lecture in 2001 Information and the Change in the Paradigm in Economics, December 8, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2001/stiglitz-lecture.pdf

[113] Wilson enjoyed a large Democratic pick up and majority in 1912, but lost 1916 badly. Roosevelt enjoyed a very strong pick up in the House and held it. Reagan enjoyed large gains in the House, but did not gain control. Clinton had losses in the House and quickly lost control of it. Bush had modest gains with weak control of the House. Obama had large gains in the House with control, but quickly lost it. Trump's weak popular vote was reinforced by small losses in the House and quick loss of control over it.

[114] Cooper, 2000, 2002.

[115] Cooper, 2014a.

[116] Cooper, 2005.

[117] Ids.

[118] Moore and Simon, 1999.

[119] Black inequality is supportive, although neoliberalism made gains, as well.

[120] The data on infectious disease is equally strongly supportive of the progressive capitalism hypothesis.

[121] The use of appliances is generally supportive, since it follows electricity for the basic appliances. Much the same would be true of the penetration of telephone services, although the data on the amount of calling in the Appendix is more uniform.

[122] Stiglitz, 1994, and 2019. offers a critique of contestability in Socialism, pp. 117-119.

[123] On cartels and collusion see: Fonseca, Norman, 2014, p. 224: Satsinder, Utton and Waterson, 1998, Heeb, et. al. 2009.

[124] Baker, 2012.

[125] Erlhauge, *2009*; Sullivan, 1977, On rent seeking Orbach, 2015.

[126] Kobayashi, 2005; Sagi, 2014.

[127] Rajan and Zingales, 2003.

[128] Id.

[129] Antitrust Experts, 2002, We are concerned that market power is on the rise in the U.S. economy generally, including in the digital markets that are the Committee's focus. Growing market power harms consumers and workers, slows innovation, and limits productivity growth. Courts have contributed to increased monopoly power through decisions that have weakened the prohibitions against anticompetitive exclusionary conduct and anticompetitive mergers. The circumscribed state of the law and insufficient resources have resulted in insufficiently aggressive government enforcement. And when enforcers do bring meritorious cases, their success has been hampered by serious deficiencies in the contemporary judicial interpretation of the antitrust statutes.

[130] Antitrust Experts, 2002, Antitrust law and enforcement have failed to respond to growing market power in substantial part because many key antitrust precedents—particularly those precedents governing exclusionary conduct—rely on unsound economic theories or unsupported empirical claims about the competitive effects of certain practices. In part for this reason, the antitrust rules constructed by the courts reflect a systematically skewed error cost balance: they are too concerned to avoid both chilling procompetitive conduct and the high costs of litigation, and too dismissive of the costs of failing to deter harmful conduct. Excessively permissive precedents and unsound or unsupported economic claims have, in turn, encouraged overly cautious enforcement policies and overly demanding proof requirements and have discouraged government enforcers and private plaintiffs from bringing meritorious exclusionary conduct cases.18 These developments have likely contributed to an increased incidence and exercise of market power across the U.S. economy.

[131] Antitrust Experts, 2002, Overly lenient antitrust rules have been defended with reference to mistaken and unjustified assumptions—including erroneous claims that markets self-correct quickly, monopolies best promote innovation, firms with monopoly power can obtain only a single monopoly profit, vertical restraints and mergers almost invariably benefit competition even in oligopoly markets, courts and enforcers are manipulated by complaining competitors, and courts cannot tell whether exclusionary conduct harms competition or benefits it. Each of those mistaken assumptions leads courts to underestimate the likelihood antitrust violations and the resulting harm.

[132] Id.

[133] Stigler Center Committee for the Study of Digital Platforms,

[134] Sallet's critique of the simplistic neo-Brandeisian arguments is certainly valid, but I want to take it a step farther. Brandeis is being more severely misused and abused by the neo-Brandeisians in the following sense. Brandeis was one of the great American progressives. He started in economics, but ended up leading in areas which were not really economic, as I will define them – privacy and democracy. More importantly, he died before he had a chance to witness what progressive policy (1939), expressed most fully in the New Deal could do. Whether or not he would have acknowledged the accomplishments of the post-war New Deal era and adjusted his economic thinking, we will never know, but short-sightedness is not something he suffered from and it is extremely important to avoid. To appreciate the importance of this possibility, we can turn back to interestingly, Piketty, 2014, p. 10, had observed that Marx under-estimated the resilience of capitalism because of when his ideas were formed and offers a similar explanation. "[Marx,] [l]ike his predecessors, totally neglected the possibility of durable technological progress and steadily increasing productivity, which is a force that can to some extent serve as a counterweight to the process of accumulation and concentration of private capital. He no doubt lacked the statistical data needed to refine his predictions. He probably suffered as well from having decided on this conclusion in 1848." The turn toward progressive policies at past critical junctures is the focal point of this analysis because we are at a critical juncture in the digital industrial revolution. Acemoglu and Robinson, 2015, p. 3, date the first progressive turn of the capitalist political economy to the 1820s and 1830s, long before Marx's conclusion that capitalism was doomed to extinction. They argue that Marx's laws fail "Mostly because they ignored both the endogenous evolution of technology . . . and the role of institutions and politics that shape markets, prices and the path of technology. . .. The distribution of the gains from new technologies was also shaped by an evolving

[135] Stigler Antitrust group, 2019, Id., p. 1.

[136] Id., p. 5.

[137] Id., p. 4.

[138] Id., p. 5.

[139] Id., p. 7.

[140] Id., p. 69.

[141] Id., p. 5.

[142] Id.

[143] Id., pp. 6-7.

[144] Id., p. 9.

[145] As the introductory essay showed, Pitofsky, 2008.

[146] Solow, 1987.

[147] Ericsson, Arthur D. Little, and Chalmers Univ., 2013, p. 10.

[148] National Broadband Plan, 2010, xi, "Like electricity a century ago, broadband is a foundation for economic growth, job creation, global competitiveness and a better way of life. It is enabling entire new industries and unlocking vast new possibilities for existing ones. It is changing how I educate children, deliver health care, manage energy, ensure public safety, engage government, and access, organize and disseminate knowledge."), Cooper 2010a.

[149] U.S Department of Justice, Complaint, U.S. v. AT&T, Mobile wireless telecommunications services have become indispensable both to the way I live and to the way companies do business throughout the United States. Innovation in wireless technology drives innovation throughout our 21st-century innovation economy, helping to increase productivity, create jobs, and improve our daily lives. Vigorous competition is essential to ensuring continued innovation and maintaining low prices.

[150] Kwoka, 2015).

[151] Id., p. P. 14

[152] Antitrust Experts, 2020.

[153] Id., p. 12.

[154] Blackstone, in Speta, 2002,

[155] Hocket, in Speta, 2002.

[156] Cooper 2003

[157] Cooper, 2013.

[158] Von Hipple, 2005.

[159] Cooper, 2013.

[160] Kahn, 1988, p. 11.

[161] Id.

[162] Cooper, 2014b.

[163] This remains true, even in the case of a recent example in the digital age – peering between interconnected networks. For a significant period, the national transmission networks engaged in unbilled interconnection and carriage. That approach worked well, only as long as it did not matter. As soon as the networks became differentiated by size or market, voluntary unbilled peering broke down. Big charged little and transmission dominant networks (those who simply transported the bits) charged eyeball heavy networks (those who were selling the content to their customers). Commercial negotiations became contentious and disputes and disruptions occurred.

[164] Cooper, 2014b.
[165] Id.
[166] Id. at 114.
[167] Tay73lor, 1994, p. 262, "Taylor identifies three characteristics of necessities – inability to replace the good, large relative size of the expenditure, and importance of the good in a broad sense. 'The point of departure will be to remind ourselves of a point this is probably too often forgotten: that price elasticity consists of two components, an income effect and a substitution effect. The substitution effect is a measure of the extent to which goods and services can substitute for one another when there is a price change without making the consumer any worse off in terms of consumer welfare. The income effect, on the other hand is a measure of the extent to which the consumer's real income is changed when there is a change in price. Ordinarily, the importance of the income effect is represented by the importance of the good whose prices has changed in the consumer's budget. Goods whose expenditure account for a small proportion of the consumer's total expenditures will have a small (or even tiny) income effect, while a good whose expenditures account for a large portion of total expenditure will have a possibly large income effect. Goods that in ordinary discourse are seen as necessities (such as heating fuels and telephone service) will also have relatively larger income effects the lower the level of income."
[168]Id., p. 262, "In assessing income effects, however, a point that is usually overlooked is the effect on the consumer's welfare of not consuming a good because of a price increase. In the case of making or not making a phone call because it has become more expensive, the question that needs to be asked is what are the consequences (not necessarily in monetary terms) of not making the call. For residential consumers, this cost is usually cast in term of the utility (or satisfaction) that is given up by the call not being made. For many calls, however, this is not the correct measure of cost, for the call may be important to the *earning* of income. In this case, the actual income effect of not making a telephone call may be large, although the decrease in real income, (as customarily measured), occasioned by the price increase may be extremely small.
[169] Kahn, 1998, p. 11.
[170] Associated Press, 1945.
[171] Cooper, 2013, 2016.
[172] http://en.wikipedia.org/wiki/Interstate_Commerce_Act_of_1887
[173] http://en.wikipedia.org/wiki/Mann%E2%80%93Elkins_Act
[174] The first consent decree was entered in 1906 in United States v. Otis Elevator, *available at* http://scholarlycommons.law.wlu.edu/cgi/viewcontent.cgi?article=3452&context=wlulr.
[175] *See* United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982).
[176] *See* Use of the Carterfone Device (1968).
[177] Federal Communication Commission, 1970, 1981, 1986,
[178] The First Report and Order is dated 1985, http://www.marcus-spectrum.com/resources/RandO_81-413.pdf
[179] Gavil and First, 2009, p. 32, Network effect are an inherent part of some markets, not a 'market failure' for which the law must necessarily correct. The law may need to adapt to network effects, but it should neither ignore them nor attempt to defy them." On the other hand, network effects can render a market more conducive to monopolization. Arrow and the *amici* had agreed that Microsoft had benefitted from network effects and that it had taken actions to further and artificially fortify the barriers to entry.
[180] . Id., p. 33.
[181] "No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks." http://www.un.org/Overview/rights.html
[182] https://en.wikipedia.org/wiki/FTC_regulation_of_behavioral_advertising: Beginning with: FTC Staff Report, Public Workshop on Consumer Privacy on the Global Information Infrastructure (December 1996), at, http://www.ftc.gov/reports/privacy/Privacy1.shtm; anding with FTC, Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers (December 1, 2010), http://www.ftc.gov/os/2010/12/101201privacyreport.pdf.
[183] FTC, 2010.
[184] Zingales, Luigi and Filippo Maria Lancieri, Stigler Committee on Digital Platforms: Policy Brief. Id., p. 14.
[185] Id., p. 16.
[186] Id., p. 19.
[187] Id., p. 19.
[188] Id., p. 21.