

CORSO: Economia e Politica Industriale
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DISPENSA:

Di Tommaso M.R., Tassinari M., Ferrannini A. (2020),
Industrial policy and societal goals. A new look at the American
case (from Hamilton to Obama and Trump), in **Pressman S. (ed.),**
How Social Forces Impact the Economy, Routledge.

Chapter 8

Industrial Policy and Societal Goals: A New Look at the American Case (from Hamilton to Obama and Trump)

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Introduction

Industrial Policy as the Nexus between Goals, Targets, and Tools

Within the debate on industrial policy, it is still true that “any random collection of six economists is sure to produce at least a dozen different opinions on the subject” (Gerosky 1989, 20). This paper conceives the notion of industrial policy as “all government interventions on production dynamics driven by national societal goals” (Di Tommaso and Schweitzer, 2013, 3). It is based on three main policy elements: *targets*, *tools*, and *goals*.

In this framework, industrial policies can target manufacturing, but also other sectors (services, construction, and agriculture), and companies, regions, population sub-groups, or other relevant actors and networks (e.g., universities). Thus, industrial policy is not restricted to industrial production, but has a wide range of *targets*. Moreover, industrial policies may adopt a variety of policy tools, ranging from financial measures to new rules that modify incentives along with individual and collective behaviors (Di Tommaso and Schweitzer 2013; Barbieri et al. 2019a, 2019b).

Finally, in our interpretation, industrial policy is not just about targets and tools; rather, it is about *societal goals* as defined by each specific community of people, groups, and interests. Industrial policy entails specifying “goals,” “targets,” and “tools,” and should be conceived of as a political intervention to redesign our future, favoring (or preventing) a transformation of industry, the economy, and society.

This conception of industrial policy connects us to the debate within *social economics* about the relationships between the economy and society, as we agree that “economic values cannot be separated from social values, and that economic relationships are framed by broader social relationships” (Davis and Dolfsma 2008, 2). Despite the neglect in mainstream thinking about the role of societal values, it is increasingly evident that governments adopt belief systems and values that shape and define their policies, thereby influencing the transformation of their economies and societies. In line with Dannreuther and Kessler (2008), we consider it fundamental to engage with the question of the role of the state in economic and societal processes, overcoming the separation of the public and private spheres.

From this perspective, this paper analyzes the long history of industrial policy in the United States, especially in relation to promoting an American model of society. In the spirit of cross-fertilization that characterizes social

economics (Pressman 2006; Davis and Dolfsma 2008; Elsner 2017), this paper analyzes the role of the US government regarding industrialization as driving the transformation of the economy and the society in the long run.

Industrial Policy and Societal Goals in the United States

Strongly polarized positions have always characterized economic debates regarding the role of the state (Krueger 1990; Le Grand 1991; Chang 1994; Pressman 2006; Lerner 2009; Chang and Grabel, 2014). Polarization is even greater regarding industrial policy throughout the history of the US. On the one side, government interference in markets has been thought to lead to failure and inefficiencies; on the other side is the idea that economic (and social) development *must* rely on government guidance. Despite emphasis on the strength of free markets, government policy has been interventionist through US history (Cowling and Tomlinson 2011; Bianchi and Labory 2011; Wade 2012; Stiglitz and Lin 2013; Di Tommaso and Schweitzer 2013; Di Tommaso et al. 2019).

Following the global recession that started in 2008, governments have intervened (regardless of whether they advocated austerity or expansive fiscal policies) to limit the severity of the decline and promote economic recovery. They have bailed out failing firms, and used both fiscal and monetary policies to stimulate economic growth. These measures were often aimed at protecting and promoting specific domestic industries. Generally, these actions were motivated by short-term economic, social, and political necessity, although in some cases interventions were more ambitious, aiming to achieve more complex structural adjustment and national societal goals.

The question motivating this paper concerns the role of industrial policy by the US federal government. The paper informs this debate by going beyond the ideological perspective that opposes government interference with unconditional confidence in the market and individual economic freedom. In particular, we discuss the policy *practices* of the US government and provide a new look at the historical experience of American industrial policy. In particular, we compare practices of the Obama (2009–2016) and Trump (January 2017—January 2019) administrations with the country’s historical policy precedents-- starting from the days following independence and then tracing government intervention through the various stages of the country’s industrialization. This long-term analysis provides insights into current debates on industrial policy.

Laying the Foundations for Sustained Industrialization

“The True Wealth and Prosperity of the State”: Manufacturing Independence and Catching Up

The *Report on the Subject of Manufactures*, presented by Secretary of the Treasury, Alexander Hamilton to the United States Congress in 1791, was the

starting point of a long-term economic policy program for industrializing and structurally transforming the US. The promotion of the (infant) American industry—through tariffs on imports, prohibitions on exporting innovative machinery, direct subsidies to the industries considered to be strategic, tax exemptions on production of raw materials, and support for improvement of national infrastructures (Hamilton [1791])—laid out a strategic vision for the future of US industry, the economy, and society.

Initially, Congress was not as enthusiastic about these proposals as Hamilton hoped for. However, over a period of thirty years, duties on foreign industrial products grew, reaching 40 percent, and they remained at high levels until the first half of the twentieth century. Hamilton's interventionist approach characterized the first growth phase of US industry (Chang 2002).

Despite regulation and antitrust policies (e.g., the Sherman Antitrust Act and the Clayton Antitrust Act, respectively in 1890 and 1914) designed to promote competition, "special cases" began to appear due to their strategic importance-- rail, iron and steel, automotive, and maritime, among others.

In the early decades of the nineteenth century, the government planned, financed, and coordinated the railway industry (Cochran 1950; Hill 1951; Carter 1968; Lloyd 1982; Dobbin 1994), gradually substituting the role initially played mostly by state and local governments, in partnership with the private sector. The government was also active in price and competition regulation. Beginning in 1860 the federal government offered land, guarantees, and loans for the construction of four transcontinental lines. It soon regulated the entire US rail system (Dobbin 1994).

Since independence, high tariffs protected the iron and steel industry. In the late nineteenth century, the creation of cartels and strategic alliances was favored, leading to a national oligopoly (Nester 1997; Wilson 2006). During two World Wars and conflicts in Korea and Vietnam, the steel industry was considered a strategic sector, necessary to support the United States military (Di Tommaso and Schweitzer 2013).

The automotive industry also attracted the attention of the federal government. In 1908, Henry Ford launched the famous Model T. Since then, specialization and mass consumption radically changed the organization of work, industry, and society in America and around the world. In this framework of entrepreneurial dynamism, the US government decided to support the development of this infant industry. Protection from foreign competitors was ensured through tariffs on imported goods, which fluctuated between 25 to 50 percent from 1913 until 1934; then in subsequent years stabilized at about 10 percent. For a long period the domestic automobile industry took advantage of protection from foreign competition, of strong and continuing public demand, and of massive government investments in equipment, technology, and infrastructure. Under these conditions, the development of the American automobile industry coincided with the development of a *de facto* oligopoly comprising three major manufacturers: Ford, Chrysler, and General Motors (GM). This situation was permitted and encouraged by a "special relationship" between the government and the auto industry, which began with the First World

War (Nester 1997; Di Tommaso and Schweitzer 2013).

Finally, during World War I, the maritime industry was given public money to construct an American naval fleet, which was sold to the private sector at the end of the war at below market price. This policy provided substantial aid to the shipbuilding industry, but it reduced demand for the construction of new ships, creating problems in the 1920s. In 1928 the government decided to intervene to save the industry from collapse. With the start of World War II, as with World War I, the government initiated a comprehensive program for constructing warships and forced the domestic industry to respond (Bingham and Sharpe, 1998).

His ideas about the need to for the US to catch up to leading industrialized countries, Alexander Hamilton can be considered as America's first proponent of industrial policy. His approach left a footprint on early industrialization, and the use of industrial policy to prepare for several wars, and finally the establishment of global industrial leadership.

"New Wars and New Deals": Industrial and Social Transformation in Critical Times

Public support for strategic industries, the embeddedness of national cartels and oligopolies in some sectors, and the presence of a public hand in managing large sectors of national industry became structural features of American capitalism by World War I. The war itself led to new government-industry relations. The interests of large companies, their development of rents, and the establishment of lobbies to negotiate with the government found new momentum thanks to the opportunities offered on the domestic and foreign markets:

entry into the World War I was part of the transformation of American society that had already begun...American leaders had turned to overseas economic expansion as the strategy of recovery and future prosperity before the United States became involved in the conflicts as either a non-fighting belligerent or an active military protagonist...the system began to produce welfare and a sense of community simply as by-product of warfare (Williams 2011, 415-416).

The Great Depression represented another "special moment" for government-industry relations in the United States, allowing substantial intervention into the national industrial system and, more broadly, toward societal goals. The National Industrial Recovery Act of 1933 had the government acting as a direct employer, along with providing contracts for public goods and services in the private sector. This New Deal effort was inspired by a Keynesian approach to economic recovery (Di Tommaso et al. 2019). Another program, the Buy American Act of 1933, placed limits on the purchase of foreign products by the government, thus supporting a wide variety of domestic industries.

Policies not only provided financing for businesses and industries in need

of capital through the Reconstruction Finance Corporation (RFC),¹ it also allowed the creation of cartels and monopolies when conceived as furthering national strategic interests (Dobbin 1993). The banking system was reformed by the Roosevelt administration. The Banking Acts of 1933 and 1935 sought to protect banks. In 1933 the Federal Deposit Insurance Corporation was created, and commercial and investment banks were separated. The Glass-Steagall Act of 1933 established Regulation Q, which put a ceiling on interest rates paid on savings accounts and a zero interest rate of checking accounts. These measures constituted a subsidy granted by the government to the banking industry (Bingham and Sharpe 1998).

During the 1930s the US government also intervened in the airline industry, which developed to support the postal service. Congress authorized the privatization of airmail service in 1925, which resulted in the private sector growing and dominating the industry. While initially the government paid carriers based on the amount of mail delivered, in 1930 it began to pay based on the size of the plane and its ability to carry passengers. This created an incentive for airlines to develop passenger services, increasing demand for new and larger aircrafts. Innovation was fostered in both the aircraft and the airline industry (Bingham and Sharpe 1998).

All in all, Roosevelt's New Deal intervened deeply in the national industrial system, in the economy, and in society, seeking to balance the interests of industry, social stability, prosperity, and democracy (Shonfield 1965; Stein 1998).

During the latter half of the 1930s President Roosevelt turned his attention to reorganizing the American economy and preparing for the impending next World War. In a few years, the whole domestic industrial sector was converted to meet military needs. The government architecture from World War I was recharged and strengthened with the creation of the War Industries Board (WIB), the Naval Consulting Board, and the Council of National Defense.

In 1940, President Roosevelt formed the National Defense Advisory Commission Board; in 1941 it was replaced by the Office of Production Mobilization (later renamed War Production Board). This, in conjunction with the Production Executive Committee and the Office of War Mobilization, involved government officials, military leaders, and managers of private industry in converting the national industrial sector to be able to respond to military needs. Foreign suppliers in defense industries were excluded through the Berry Amendment of 1941 (Weiss and Thurbon 2006). The combination of growing public demand for goods and services in the civilian sector and government funds to conduct R&D for military purposes resulted in a significant boost to the development of economies of scale and learning in a selected number of private enterprises (Di Tommaso et al. 2019). For yet another decade, American industry was supported by public demand, driven by military needs, managed by a small group of public officials and a limited number of private managers (Weiss and

¹ From 1932 to 1935 the RFC distributed more than \$2 billion to companies unable to obtain credit from the private sector (Bingham and Sharpe 1998).

Thurbon 2006; Nester 1997; Di Tommaso and Schweitzer 2013). Producing and fighting were the two imperatives that linked the interests of industry and government.

Since the World War I, the military capabilities of the nation have been consistently maintained, with government involvement in the development of weapons, machinery, military technology, and R&D funding-- a nearly continuous line assuring the strength of the US military sector.²

“Toward the Great Society”: Industrial Growth, Technological Advancement, and Expansion of Socioeconomic Opportunities

The end of the war provided new opportunities for future growth. Victory allowed the “frontier” to be moved, guaranteeing further expansion of the market for US industry. Military and political influence over a vast number of nations offered immense economic benefits and extraordinary new opportunities for national industries.

As Di Tommaso et al. (2019) argues, several features of the post-war era could not be removed in a few months or even a few years—support for particular industries, tolerating oligopolies and cartels in strategic sectors, and a public hand in the management of national industries. The Cold War with the Soviet Union further justified a “special relationship” between the government and industry, with substantial industrial and technological implications (both domestically and globally) for American society. The 1945 Vannevar Bush Report highlighted that scientific progress, fed by both basic and applied research, had to be promoted through public programs.

Support for the military played an important role in developing infant industries in the post-war years. The Soviet launch of Sputnik, the first satellite in orbit around the Earth, in 1957 can be seen not only as the decisive boost to fill the perceived technological gap with the Soviets (Weiss 2014), but more broadly as illustrating the close relationship between technological superiority and national defense. To increase technological innovation in the military and civil fields, in 1958 the Advanced Research Projects Agency (ARPA), later renamed the Defense Advanced Research Projects Agency (DARPA), along with the National Aeronautics and Space Administration (NASA) and the Small Business Investment Corporation (SBIC) were established (Block 2008; Fuchs 2010; Weiss 2014). Federal R&D expenditures increased from 1.5 percent to more than 3 percent of US GDP in just a decade (Weiss 2014; Block 2008; Block and Keller 2011; Mazzucato 2013).

Many studies highlight how the rise of the Information and Communications Technology (ICT) industry was based on investments in the military field (Markusen et al. 1991; Abbate 1999; Fong 2001; Mazzucato 2013; Di Tommaso et al. 2019). Growing public demand for computers in the 1950s

² War times ranged from WWI to the conflicts in Iraq and Afghanistan, and included the Cold War (See McNeill 1982 and Weiss 2014).

and 1960s³ provided incentives for private enterprises to develop new products and new technologies, taking advantage of substantial protection from foreign competition. The model of innovation based on startups began its development (Mazzucato 2013). A growing number of small businesses, able to create important innovations, began to replace large companies that had formerly been protected (perhaps by barriers to entry facing competing firms); this gave government officials the opportunity to stimulate the private sector through its demand for new technology (Mazzucato 2013; Block 2008).⁴

Development of the Internet goes back to research funded by the US Department of Defense (DoD) in the 1960s. The computerization of military technology at that time tended to concentrate development, production, and presence of equipment in a few strategic areas of the country. This made the nation more vulnerable to missile attacks. DARPA then began funding private partners to develop a network able to connect geographically scattered computers. In 1969, for the first time, two computers located at the University of California, Los Angeles (UCLA) and Stanford University were connected through a telephone line. This was the first step in developing an important infant industry that was publicly protected because of its close links to the national military interests (Abbate 1999; Ceruzzi 2003; Kenney 2003).

Similar patterns shaped the development of nuclear energy⁵ used for civilian purposes, whose early stages began after World War II with dedicated research centers and national laboratories. The Atomic Energy Act, which promoted technological advances in nuclear energy production was approved by President Eisenhower in 1954. In the same year the Power Demonstration Reactor Program was announced by the Atomic Energy Commission. This program, requiring government and industry cooperation, led to the first generation of nuclear reactors for electricity production. Thanks to this favorable investment environment, by 1973 the US had 100 power plants producing electricity through atomic energy (Di Tommaso and Schweitzer 2013).

The fortunes of the biotechnology industry, today one of the most dynamic sectors of the US economy, grew due to actions by the Nixon administration (Hurt 2011).

Due to competitive challenges from abroad, since 1969 the US government has sought to convert the national research program for biological weapons to civilian purposes; the biomedical industry came to be considered strategic for the economy and society. US successes in biotech can be traced back to early research about recombinant DNA, financed by the National Science Foundation and the National Institutes of Health (Hurt 2011; Di Tommaso and

³ Commissioned by the United States Department of Defense, Air Force, Army Signal Corps, Atomic Energy Commission, NASA, Weather Bureau (now the National Center for Atmospheric Research), the National Institutes of Health, and Social Security Administration.

⁴ A clear example of the success of this model of innovation is Apple (Mazzucato 2013). For a discussion on the role of the US government in developing computer technology, see Mazzucato 2013; Adner 2012; Ceruzzi 2003; Audretsch 1995.

⁵ At the end of 1930s, the Manhattan Project funded research for developing atomic weapons that were dropped on Hiroshima and Nagasaki in 1945.

Schweitzer 2013).

After World War II, national industry could count on public demand fueled by the Cold War, opportunities offered by foreign markets, and on vast domestic demand by the rising middle class. However, the government had to deal with excesses that could threaten growth, as well as structural changes in the economy and society. A large part of America was excluded from the middle class, and people wanted the government to intervene and promote the social goals of economic and social inclusiveness.

President Lyndon Johnson laid the foundations for this with his Great Society. In his new model, government action and industrial policy had transform America by including (at least some of) the many who remained excluded. Federal programs promoting education, health, welfare services, social security, and the fight against poverty were developed (Council of Economic Advisers 1965, 153). They dealt with immediate shortfalls in living standards, helped to develop the new workforce that industry needed, and supported consumption spending on private goods.

The Consolidation of Global Leadership

“The Government Is the Problem, Not the Solution”: Industrial Policy in the Neoliberal Era

It was during the late 1970s that the term “industrial policy” entered American political discourse, stimulating a polarized debate inside and outside academic circles.⁶ President Carter established the Economic Policy Group to design a national industrial policy (Council of Economic Advisers 1981; Bingham and Sharpe 1998). This was never implemented as Carter was not re-elected, and the newly elected President Reagan opposed government intervention in the economy.

The new Republican administration relied on academic literature documenting government failures,⁷ and political rhetoric emphasizing the freedom of markets and individual decision-making. They opposed any industrial policy. Instead, the Reagan administration looked to protectionist policies to solve structural issues (such as the \$114 billion US trade deficit in 1985) and to save jobs (Council of Economic Advisers 1986) in sectors experiencing problems-- automotive, textiles and clothing, steel, and semiconductors (Baldwin and Richardson 1987; Richman 1988; Niskanen 1988).

Nonetheless, Reagan didn't hesitate to follow his predecessor and save companies considered “too big to fail.” In 1979, Chrysler received \$1.5 billion in guaranteed on loans, \$3.5 billion in additional capital, and concessions from labor unions. After 1981 the entire automotive industry was protected (Graham 1992; Di Tommaso and Schweitzer 2013), as auto imports reached 30 percent of

⁶ See Reich 1982, 1984; Etzioni 1983; Schultze 1983; DiLorenzo 1984; Dorn 1984; Dumke 1984; Johnson 1984; Niskanen 1984; Norton 1986; Eisinger 1990; White 2007.

⁷ See Krueger 1990; Le Grand 1991; Chang 1994; Buigues and Sekkat 2009; Di Tommaso and Schweitzer 2013.

US sales. For instance, a Voluntary Export Restraint negotiated with Japanese government reduced the number of imported cars from Japan.⁸ Similarly, in 1986 the Reagan Administration pressured the Japanese government to set a fair market price (determined by the US Department of Commerce) on memory chips. Japan was also pressured to apply the same price in third-country markets to increase sales of American chips there. The Japanese government refused to accept these conditions, and the US imposing a 100 percent tariff on \$300 million of Japan goods (Niskanen 1988; Richman 1988).

The steel sector was protected through restrictions on European exports. In textile industries, industrial nations adopted the Multi Fiber Agreement to regulate imports through a system of quotas on exports (Niskanen 1988).

Other measures are more focused on protecting and supporting American industry. The DoD, in particular, has played a central role (Reich 1982; Weiss 2014). During the 1980s it actively supported various industries, such as machinery tools and semiconductors, both threatened by foreign competition.⁹ Other departments and agencies, such as the Department of Energy, NASA, the National Science Foundation, and the National Institutes of Health, continued to influence technological advances and industrial development.

In this context, technology transfer from government agencies to the private sector became (and remains) a new strategic priority. The University and Small Business Patent Procedures Act of 1980 (known as the Bayh-Dole Act), the Technology Innovation Act of 1980, and the Federal Technology Transfer Act of 1986 introduced several opportunities for technology transfer. It allowed private universities, small businesses, and non-profit institutions to own the patents emanating from government funded research. Later it extended these rights to private companies of all sizes and public universities. And it allowed federal laboratories to cooperate with private companies and retain a portion of the royalties paid to the private sector (Council of Economic Advisers 1989).¹⁰

Finally, programs were implemented to support the growth of small businesses at the local level. The Small Business Innovation Research program (SBIR), launched in 1982, established a consortium between the Small Business Administration and other government agencies, including the DoD, the Department of Energy, and the Environmental Protection Agency. This program called upon government agencies to set aside a fraction of their research budgets to support initiatives from small private companies. In addition to promoting the development of new startups (Lerner 1999; Audretsch 2003; Mazzucato 2013), the program helped create a new innovation system based on a network of institutions and organizations at local, state, and federal levels, able to provide

⁸ The 1982 agreement limited Japanese exports to the US to 1.68 million cars. This limit was gradually increased (Niskanen 1988; Richman 1988; Bingham and Sharpe 1998).

⁹ For instance, the National Center for Manufacturing Sciences (NCMS) and the Semiconductor Manufacturing Technology Initiatives (SEMATECH) were set up respectively in 1986 and 1987 for developing new technologies. The latter was supported in 1989 with \$100 million allocated by the DoD (Council of Economic Advisers 1989; Irwin and Klenow 1996; Block 2008; Wade 2010).

¹⁰ Unsurprisingly, the number of university patents increased from 230 in 1976 to 900 in 1987 (Council of Economic Advisers 1989).

assistance and financial capital to innovative enterprises (Block and Keller 2011; Mazzucato 2013).¹¹

The Manufacturing Extension Partnership (MEP), launched in 1988, created state and local government centers providing managerial services and technical assistance to enterprises (Shapira 2001). This helped improve industrial productivity, competitiveness, and the technological ability of small businesses.

“The End of History”: Leading and Exploiting Globalization

The 1990s saw the collapse of the Soviet Union and the end of the Cold War, giving the US a position of global political leadership that was undisputed and considered by many to be definitive (Fukuyama 1992). The US was ready to take advantage of the extraordinary possibilities that the new global scenario offered to the national economy and industry.

In the early 1990s the international political and economic order was changing radically, providing a boost to globalization. Once again there was a possibility of moving the “frontier” and expanding markets. The ability of domestic firms to enter the global networks of suppliers and customers became increasingly important (Pack and Saggi 2006; Gereffi et al. 2005; Gereffi 2014). Economic policy likewise changed in all industrialized economies (Kitson and Michie 1995; Weiss 1997; Buigues and Sekkat 2009; Mügge 2011). Government played a role as regulator of domestic economic activity, by providing public goods to strengthen competitiveness and at the international level, by setting the rules of international trade.

The Uruguay Round of negotiations that created the World Trade Organization (WTO) in 1994 involved undisputed US political and economic leadership (Panitch and Gindin 2012). Its main goals were reducing both tariff and nontariff trade barriers, regulating foreign investment, protecting intellectual property, regulating previously excluded sectors (such as agriculture and services), adopting uniform quality standards for products, safeguarding each country’s labor force, and adopting a system to resolve disputes among member countries (Council of Economic Advisers 1995).

The Uruguay Round also liberalized public procurement markets at the international level, as a result of the WTO Government Procurement Agreement in 1994 (Trionfetti 2000; Hoekman and Mavroidis 1997), although the issue of discrimination against foreign firms in accessing public procurement markets was not really solved. The US gained increased demand for its products, ensured by regulations opening foreign markets and protection of domestic markets thanks to legal loopholes and other informal barriers¹² (Di Tommaso et al. 2019).

Within this scenario, the North American Free Trade Agreement (NAFTA) took a central position. In 1993, the Clinton administration ratified the

¹¹ See also Whitford 2005; Block 2008; Weiss 2014; Buigues and Sekkat 2009; Schrank and Whitford 2009; Wade 2012; Di Tommaso and Schweitzer 2013.

¹² Weiss and Thurbon (2006, 705) contend that “no other state has been as globally active in driving open procurement markets; and no other state has been as nationally protectionist in legally mandating ‘buy national’ policies.”

agreement. NAFTA eliminated most trade (tariff and nontariff) barriers; developed common rules for investment; liberalized sectors like finance, ground transportation, and telecommunication; strengthened labor market and environmental protection laws; created a unified system of intellectual property rights protection; and established a mechanism for resolving disputes (Council of Economic Advisers 1992, 1993, 1995).

The Asia-Pacific Economic Cooperation (APEC) program, established in 1989, aimed at increasing economic cooperation between the US and Asian economies. The Trade Enhancement Initiative, the Andean Trade Preference Initiative, and the Enterprise for the Americas Initiative (EAI) were primarily motivated by the desire of the US government to promote the transition to a market economy in the Soviet bloc countries. Finally, taking into account the worsening of the debt problem in developing countries, the United States actively contributed to promoting institutional reforms and market liberalization in the countries that needed to renegotiate their loans with Western banks (Council of Economic Advisers 1990, 1997; Stiglitz 2002).

Undoubtedly the new “rules of the international economic game” coincided with a period in which the views of the US government and international institutions coincided (Council of Economic Advisers 1995, 212-213). The bargaining power and strategic interests of the US had an almost global reach (Phillips 2005; Katzenstein 2005; Panitch and Gindin 2012).

These new international political and economic conditions increased global stability, and enabled the US to reduce military spending. So something other than defense R&D was needed to promote technological advancement and innovation (Council of Economic Advisers 1991, 1993, 1994). Development of ICT became a priority,¹³ one strongly encouraged by the Clinton administration through the Information Technology for the 21st Century Initiative, the Internet Tax Freedom Act, the WTO’s Information Technology Agreement and the WTO’s Basic Telecommunication Agreement (Council of Economic Advisers 2000).

A government and private sector partnership was at the center of science and technology policies, such as the National Cooperative Research and Production Act, which further liberalized research cooperation, and the Partnership for a New Generation of Vehicles (PNGV), which sought to develop environmentally friendly technologies for motor vehicles. Funds for research conducted by the National Science Foundation and the National Institutes of Health increased respectively by over 60 percent and 80 percent during the Clinton administration.

Finally, innovation efforts by private firms were encouraged by maintaining tax credits for R&D expenditures (equal to 20 percent in 1999) (Council of Economic Advisers 2001) and by introducing a new system of intellectual property rights protection through the Antitrust Guidelines for the Licensing of Intellectual Property of 1995 (Council of Economic Advisers 1999).

¹³ From 1990 to 2000 the contribution of this industry to GDP rose from 5.8 percent to 8.3 percent (Council of Economic Advisers 2001).

The Clinton administration made arguments that were exactly the opposite of the Reagan administration-- government intervention was not destined to fail, but the efficiency of public administration action could be improved. Their approach was that it may be necessary to intervene in national industries in order to benefit the whole society.

Following the approach of Clinton, the WTO Doha Round in 2001 gave President George W. Bush the opportunity to sign several trade agreements that liberalized foreign markets and relieved American businesses from international competition (Ketels 2007). While the agriculture was subsidized so it could compete with foreign production (Council of Economic Advisers 2009), tariffs were imposed in strategic industrial sectors, such as textiles, wood, and steel. However, the global geopolitical situation was less favorable to the US and its protectionist approach was challenged (Gallagher 2007). The WTO forced the US to remove the Foreign Sales Corporation, and mounting international pressure led Congress to abolish the Continued Dumping and Subsidy Offset Act in 2007, which provided firms in difficulty with funds obtained from import duties.

A new policy, the American Competitiveness Initiative (ACI), was launched in 2006. It sought to double public investment in R&D over ten years (OSTP 2006; Ketels 2007), but lacked enough support in Congress to be fully implemented (Buigues and Sekkat 2009).

The global financial crisis of 2008 forced George W. Bush to intervene at the end of his second term. Government intervention was required to prevent the collapse of the entire banking system. Along with a bailout of numerous banks, the government gave the US Treasury the authority to purchase \$700 billion worth of mortgage-backed securities. These actions clashed with Republican rhetoric against government intervention in the economy; however, it was necessary to in order to save the US economy.

“Yes, We Can”: Crisis, Recovery, and New Societal Goals

Relaunching the National Economy

Barak Obama was elected President in 2008. His first order of business was to revive the economy through the American Recovery and Reinvestment Act (ARRA). Its goal was to reduce unemployment and promote the competitiveness of US industries in the international arena. The \$787 billion stimulus not only addressed the immediate economic emergency, it also sought long-term change of the American economy and society (Council of Economic Advisers 2010).

The ARRA devoted substantial resources (around one-third of its budget) to particular segments of the economy, such as the financial sector, strategic industries, ICT, and broadband. It also included actions in the fields of education and life-long learning, science and technology, trade policy, and regional and small businesses development (Council of Economic Advisers 2010; Di Tommaso and Schweitzer 2013).

The Obama administration followed George W. Bush and promoted

intervention supporting the financial sector through the Financial Stability Plan, which added liquidity to the banking system by allocating \$2 trillion to buy mortgages from banks. These measures, however, had only a limited effect. Banks were reluctant to lend because of pessimism over the economy, and unable to lend until they built up their capital.¹⁴

The automotive industry also got bailed out. The Temporary Asset Relief Program (TARP) allocated \$17.4 billion to GM and Chrysler, both at risk of bankruptcy. The US government became the largest owner of GM, acquiring most of its assets. The Obama administration sought an immediate change to the managerial practices leading to GM's economic plight.

The Obama intervention with the greatest visibility concerned healthcare. In 2010 Congress approved the Affordable Care Act (ACA, also known as "Obamacare"), and the Health Care and Education Reconciliation Act. These bills sought to extend health insurance coverage (by making it mandatory for most employers and individuals). The reform was expected to increase demand for health insurance, stimulating the insurance sector and health care industry. The ACA also sought to reduce health care costs as well as insurance costs, thanks to greater risk sharing.¹⁵

Modernizing the energy sector and developing "green" industries were distinctive features of Obama's industrial vision. He sought to reduce US dependence on foreign, improve energy efficiency, create quality green jobs, and reduce pollution. \$23 billion was devoted to investment in renewable energy (solar, wind, and geothermal); \$16 billion to plug-in hybrid vehicles, electric vehicles, and related infrastructure; and \$300 million for purchasing energy efficient vehicles produced in the United States; \$4 billion for constructing a modern "smart grid" to reduce national consumption of electrical energy; and \$400 million for establishing the Advanced Research Projects Agency–Energy (ARPA-E) to conduct scientific research in advanced energy technologies (Council of Economic Advisers 2010; Di Tommaso and Schweitzer 2013).

The enhancement of science and technology, together with education and basic research, was also included in the ARRA, with a budget of about \$100 billion (Council of Economic Advisers 2010). This fostered the creation and commercialization of innovative products by supporting startups and protecting intellectual property rights (Council of Economic Advisers 2012).

In trade policy, the Obama administration wanted to strengthen international rules to safeguard American exports. During its first term, the administration took legal action in the WTO to remove barriers constraining American exports of automotive spare parts in the Chinese market. The final verdict forced China open up its market. The administration also launched an appeal against subsidies and tax forgiveness by China that reduced production

¹⁴ The administration also sought financial regulatory reform to promote future stability. The 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act established the Financial Stability Oversight Council, which was responsible for monitoring the stability of the financial system. However, it didn't get the more radical reforms it wanted (see Di Tommaso and Schweitzer 2013).

¹⁵ For more details on the ACA, see Di Tommaso and Schweitzer (2005, 2010, 2013).

costs for domestic companies.

Regional development and support to small- and medium-size enterprises were also Obama administration priorities. The ARRA allocated about \$730 million to the Small Business Administration (SBA) to help small businesses address the financial crisis. Other SBA initiatives to support small business were the Export Market Entry Training Program (EMETP) and the Export Trade Assistance Program (ETAP), both aimed at promoting American exports (Di Tommaso and Schweitzer 2013). Finally, in early 2011, Congress expanded the Small Business Jobs Act, providing \$2 billion of new tax incentives for new businesses and startups (Di Tommaso and Schweitzer 2013).

Finally, the 2010 budget allocated \$50 million (Regional Planning and Matching Grants) to improve living conditions in economically backward areas and a 2010 program in the Department of Labor subsidized job training for the long-term unemployed (Di Tommaso and Schweitzer 2013).

Expanding Economic Opportunities

During his second term in office, Obama focused on three challenges-- reducing long-term unemployment, expand the potential of the labor force, and reducing social inequalities (Council of Economic Advisers 2014).

The Opportunity, Growth and Security Initiative (OGSI) (Council of Economic Advisers 2014), allocated \$56 billion to be shared by the civilian and the military areas. The money supported policies in education and work training, basic health research, applied research in energy efficiency and renewable energy (including electric motors, batteries, and ultralight materials for electric vehicles), modernization of state electricity grids, a national network of 45 new centers for manufacturing innovation, modernization of the national aviation system, and improved public sector efficiency.

Regarding science and technology, the Obama administration emphasized research addressing new industrial and social challenges. The 2015 the federal budget included \$135 billion for research (a 1.2 percent increase compared to 2014), with \$2.2 billion for advanced manufacturing, \$325 million for the transition to clean energy, \$2.5 billion for the United States Global Change Research Program, \$30.2 billion for the National Institutes of Health (including research against cancer and Alzheimer's disease), and \$7.3 billion for the National Science Foundation (Di Tommaso et al. 2019).

Finally, the Obama administration worked to expand international markets by promoting trade and investment with Europe and Asia. The Trade Facilitation Agreement within the WTO aimed at speeding up the movement of goods and services by increasing customs cooperation, and standardizing import and export procedures. The administration also pushed the Trans-Pacific Partnership Agreement (TPP), which included 12 countries in Asia, and the Transatlantic Trade and Investment Partnership (TTIP) with the European Union (Council of Economic Advisers 2014). These regional trade initiatives were designed to given the US easier access to markets with a single regulatory framework (Capling and Ravenhill 2011; Williams 2013; Fergusson et al. 2013).

“Make America Great Again”: Rhetoric and Policies

Selling a Hybrid Policy Approach and Building Consensus

The 2016 US presidential campaign was radically disrupted by the participation of tycoon Donald J. Trump, an outsider to the American political system. Trump placed himself at the opposite extreme from Obama, promoting a populist rhetoric aimed at delegitimizing the political establishment and its globalization policy. Trump blamed free trade policies as detrimental to the national interest.

After winning the Republican nomination, Trump changed his political discourse by incorporating some traditional Republican positions. However, the real innovation was Trump’s attempt to garner white working-class support with an anti-globalization and neo-protectionist rhetoric, and blaming the Democratic Party for having lost industrial jobs.

Trump’s presidential campaign was something unique in American political history. A first distinctive element was his simplifying the rhetorical discourse by using Twitter.¹⁶ His economic agenda favored protectionist demands, expressed by a large strata of the population, over globalization and international agreements. Trump’s two main slogans—“America First” and “Make America Great Again (MAGA)” —should be seen as appealing to the losers of globalization (Di Tommaso 2017).

Trump’s rhetoric during the electoral campaign can be summed up as a hybrid of laissez-faire proposals for the business sector, significant investment in physical infrastructure, and neo-protectionism (Di Tommaso et al. 2019). Cutting the corporate income tax¹⁷ was set forth as a way to enable multinationals invest in the US and bring back industrial jobs. Concerning infrastructure, Trump promised to more than double the \$300 billion that his Democratic rival, Hillary Clinton, planned to spend. He proposed \$1 trillion of projects over ten years by offering tax credits to private companies that finance projects and also giving the companies an equity stake in the projects. According to Ross and Navarro (2016), every \$200 billion in additional infrastructure spending would create \$88 billion in wages for average Americans and increase GDP more than 1 percent.

On trade and industrial policy, Trump promised to “Make Trade Fair Again” and “Bring Manufacturing Jobs Back to America.” He blamed protectionism and interventionist policies adopted by China and Mexico. On the campaign trail he committed to withdraw the US from the TPP (Trans-Pacific Partnership) and from NAFTA. Further, he promised to impose tariffs on goods from countries actively manipulating their currencies to gain a competitive advantage (with China a primary target) and to bring trade cases against China for violating WTO rules and restrictions.

The goal of these policies was to trigger a recovery in domestic

¹⁶ Between July 21, 2016 (end of the 2016 Republican National Convention) and November 8, 2016 (presidential election), there were 1,374 tweets, with an increase of followers from 9,892,781 to 13,018,832 (Source: Trackalystic.com).

¹⁷ Trump promised to reduce corporate income tax rates from 35 percent to 15 percent.

manufacturing employment. Economic openness to international trade was seen as unfair and damaging to traditional US industries and costing the nation good manufacturing jobs.

Analyzing his surprising election, one can see that votes from blue-collar workers was crucial for Trump's success, especially in some core places of the industrial Midwest, such as Ohio and Michigan. Trump received massive support among white the lower middle classes and workers employed in traditional economic sectors.¹⁸

Governing and Protecting Industries (and Interests)

The first 24 months of the Trump administration (January 2017—January 2019) were characterized by a combination of controversial declarations and substantive actions consistent with his electoral campaign. In this regard, according to Di Tommaso et al. (2019, 99),

the application of the *Trump-Economics* has been so far partially constrained by the forces in support of the American capitalism, whose financial interests are likely to seek long-term continuity, thus repudiating the radical attacks by the new President on the globalization system that they contributed themselves to shape.

By investigating the initial steps of the new administration it is possible to highlight some shifts in fiscal and industrial policy.

It is worth exploring the first, and so far most important, official economic document of the Trump administration, *A New Foundation for American Greatness, for Fiscal Year 2018* (Budget of the U.S. Government 2018), followed by *Efficient, Effective, Accountable. An American Budget, for Fiscal Year 2019* (Budget of the U.S. Government 2019).

The former report contains a short preface titled “A New Foundation for American Greatness” that summarizes the human cost of economic stagnation. It emphasizes how “horrible trade deals ... have exported American jobs” resulting in “cities and towns devastated by unfair trade policies” (Budget of the U.S. Government 2018, 6). In addition, the report blames burdensome federal regulation, criticizing the growing regulatory state mainly with respect to the environment. Compliance costs for fuel economy and power plant regulations are estimated to be \$10 billion per year. Moreover, it attacks burdensome permitting procedures related to infrastructure investment and the highest business taxes in the OECD.

Subsequently, it stresses the need for new job and economic growth policies, and proposes reduced federal spending to achieve this end—in particular, a \$3.6 trillion spending reduction over the next 10 years (keeping the debt-to-GDP ratio at 60 percent). Trump would start by repealing Obamacare and substituting of Medicaid for it. Then he would reform the US welfare

¹⁸ Edison Research, National Election Poll, November 23, 2016.

system, which makes the unemployed dependent on public subsidies, and reduce retirement benefits for government employees, which are considered an unsustainable long-term cost. Moreover, simplification of the tax codes and the reducing income and business taxes were central to the 2018 United States federal budget (Budget of the U.S. Government 2018, 9-13). Finally, the top budget priority of the new U.S. government is investment in defense, mostly based on discretionary budget authority for the Department of Defense (DoD): it led to a \$52 billion increase (as compared to 2017) up to a total of \$639 billion, along with the DoD receiving 45.4% of total federal R&D funding, especially through the Research, Development, Test, and Evaluation (RDT&E) account of the Pentagon. Overall, Trump aspired to reprioritize Federal discretionary spending-- increasing national security funds by relying on budget cuts in nondefense spending.

Such fiscal measures would substantially benefit the upper classes, since three-fifths of public spending cuts come from programs assisting individuals with low or middle incomes (Herrera and Friedman 2017). From this perspective, Trump's concrete policy proposals mark a radical departure from his electoral rhetoric, which invoked reconfiguring domestic production in favor of the globalization losers.

The split between rhetoric and practice is a key characteristic of Trump, as is making declarations to shape expectations, the business environment, and American society. Trump used this in three ways to try to bring manufacturing jobs back to the US (Di Tommaso et al. 2019):

First, publicly blaming and threatening those manufacturers who move, or plan to move, production abroad. This strategy was already evident during his electoral campaign. For example: "Vast numbers of manufacturing jobs in Pennsylvania have moved to Mexico and other countries. That will end when I win!" (Trump 2016, August 1). This became more explicit during the first months of his administration with regard to car manufacturers:

"General Motors is sending Mexican made model of Chevy Cruze to U.S. car dealers-tax free across border. Make in U.S.A. or pay big border tax!" (Trump 2017, January 3).

"Toyota Motor said will build a new plant in Baja, Mexico, to build Corolla cars for U.S. NO WAY! Build plant in U.S. or pay big border tax" (Trump 2017, January 5).

Second, gaining support from US manufacturers through announcements, as exemplified by Trump (2017a):

For decades, the policy of Washington, DC, on the subject of manufacturing was a policy best summarized in one word: surrender. They surrendered. Under my administration, the era of economic surrender is over, and the rebirth of American industry is beginning.

Similarly, "Almost 500,000 Manufacturing Jobs created since I won the Election. Remember when my opponents were saying that we couldn't create

this type of job anymore. Wrong, in fact these are among our best and most important jobs!” (Trump 2018, August 3).

A concrete action plan, the Manufacturing Jobs Initiative, was launched in January 2017. It aimed to get information and perspectives from a diverse range of business leaders on how to put Americans back to work. It was ended by Trump in August 2017 as a form of retaliation after business leaders protested his comments about a white supremacist rally in Charlottesville that led to violence and the death of one woman.

Third, reducing the corporate income tax. Although cut by less than what Trump promised during the campaign, the Senate approved a \$1.9 trillion tax cut in December 2017. Trump (2017b) presented it as follows:

“Our plan also lowers the tax on American business from 35 percent all the way down to 21 percent. That’s probably the biggest factor in this plan. We’ve become competitive all over the world. Our companies won’t be leaving our country any longer because our tax burden is so high...These changes alone are estimated to increase average family income by more than \$4,000.”

Subsequent actions by business leaders were presented to the public as a direct consequence of this tax bill. In the case of Apple: “I promised that my policies would allow companies like Apple to bring massive amounts of money back to the United States. Great to see Apple follow through as a result of TAX CUTS. Huge win for American workers and the USA!” (Trump 2018, January 17). The six-month anniversary of the Tax Cuts and Jobs Act provided an occasion to boast about the results of his policies (Trump 2018a):

The economy is indeed doing well. Six months ago, we unleashed an economic miracle by signing the biggest tax cuts and reforms...The biggest tax cuts in American history...Now it’s my great honor to welcome you back to the White House to celebrate six months of new jobs, bigger paychecks, and keeping more of your hard-earned money where it belongs, in your pocket or wherever else you want to spend it...Our country finally has a tax system that is pro-jobs, pro-worker, pro-family, and pro-American...“Make America Great Again,” that’s what’s happening.

In addition, up to January 2019 Trump had signed two Executive Orders explicitly referring to the traditional Buy American principles in public procurement.

On trade and industrial policy, the neo-protectionist approach of the Trump administration is in line with campaign promises and is based on a combination of bilateral agreements (as opposed to the long-lasting multilateral approach) and concrete actions against main US trade partners. Along with the repeal of TPP in January 2017, signing the United States–Mexico–Canada Agreement (USMCA) in November 2018 is even more illustrative of Trump’s approach to trade relations and policy. After having agreed to a preliminary deal with Mexico in August 2018, this was used to convince Canada to sign on

(Trump 2018, October 1):

Late last night, our deadline, we reached a wonderful new Trade Deal with Canada, to be added into the deal already reached with Mexico...It is a great deal for all three countries, solves the many deficiencies and mistakes in NAFTA, greatly opens markets to our Farmers and Manufacturers, reduce Trade Barriers to the U.S. and will bring all three Great Nations closer together in competition with the rest of the world. The USMCA is a historic transaction!

Two examples illustrate the implementation of neo-protectionist policies.

In January 2018 the US government imposed tariffs on imported residential washing machines and solar cells and modules, after the Office of the United States Trade Representative (USTR) stated that increased foreign imports as a serious injury to domestic manufacturers. In March 2018 the United States imposed a 25 percent *ad valorem* tariff on steel articles imported from all countries,¹⁹ for national security reasons (Lowrey 2017). As is typical with Trump, an initial investigation launched in April 2017 under Section 232 of the 1962 Trade Expansion Act was presented as necessary for industrial and employment reasons: “We’re going to use American steel, we’re going to use American labor, we are going to come first in all deals.” (Trump 2017, April 20); “Steel is a big problem, I mean, they’re dumping steel. Not only China, but others. We’re like a dumping ground, okay? They’re dumping steel and destroying our steel industry. They’ve been doing it for decades, and I’m stopping it. It’ll stop.” (Trump 2017c). This proclamation itself was presented with America First rhetoric: “We must protect our country and our workers. Our steel industry is in bad shape. IF YOU DON’T HAVE STEEL, YOU DON’T HAVE A COUNTRY!” (Trump 2018, March 2) and, later, “Not seen in many years, America’s steelworkers get a hard-earned raise because of my Administration’s policies to help bring back the U.S. steel industry, which is critical to our National Security. I will always protect America and its workers!” (Trump 2018, November 14).

Trade disputes with China clearly deserve some attention. Despite declarations that the two economies were complementary, and the need for mutually beneficial cooperation, protectionist actions by US and China between January and November 2018 constituted a trade war over agricultural and manufacturing products, as well as over technology and intellectual property.

After Donald Trump and Xi Jinping met during the G-20 Summit in Buenos Aires, the trade war was placed on hold for 90 days from early December 2018 to allow for negotiations toward a deal: “My meeting in Argentina with President Xi of China was an extraordinary one. Relations with China have taken a BIG leap forward! Very good things will happen. We are

¹⁹ The tariffs at first excluded Canada and Mexico, but were extended to them through Section 323 Tariff Modifications in May 2018, and then to Turkey in August 2018.

dealing from great strength, but China likewise has much to gain if and when a deal is completed. Level the field!” (Trump 2018, December 3) These negotiations focused on technology transfer issues, protection and enforcement of intellectual property rights, tariff and nontariff barriers, cyber theft, market-distorting forces (subsidies and state-owned enterprises, according to the United States), as well as other structural issues such as the trade deficit and the role of currencies and currency manipulation.

A mix of optimism and threats characterize Trump during 90 days of negotiations that had to reach a satisfactory outcome by March 1, 2019, as illustrated by the Trump (2018, December 4): “President Xi and I want this deal to happen, and it probably will. But if not remember I am a Tariff Man. When people or countries come in to raid the great wealth of our Nation, I want them to pay for the privilege of doing so. It will always be the best way to max out our economic power. We are right now taking in \$billions in Tariffs. MAKE AMERICA RICH AGAIN”.

In line with the previous sections, it is important to discuss the elements characterizing Trump’s rhetorical practices concerning the automotive industry.

First, Trump explicitly recognizes its strategic relevance for the US economy, especially through claims, announcements, and meetings: “We have, at this table, the biggest car manufacturers in the world. We’re working on how to build more cars in the United States.” (Trump 2018b).

Second, since the presidential election Trump has consistently and implicitly, incentivized automakers to return jobs to the US. Trump blames car manufacturers who have moved—or were planning to move—production abroad, such as in the GM case: “Very disappointed with General Motors and their CEO, Mary Barra, for closing plants in Ohio, Michigan and Maryland. Nothing being closed in Mexico & China. The U.S. saved General Motors, and this is the THANKS we get! We are now looking at cutting all @GM subsidies, including for electric cars...I am here to protect America’s Workers!” (Trump 2018, November 27).

On the other hand, he openly rewards companies (e.g., Ford, Fiat-Chrysler, GM, Toyota, Mazda) announcing investments in United States plants: “It’s finally happening - Fiat Chrysler just announced plans to invest \$1BILLION in Michigan and Ohio plants, adding 2000 jobs. This after Ford said last week that it will expand in Michigan and U.S. instead of building a BILLION dollar plant in Mexico. Thank you Ford & Fiat C!” (Trump 2017, January 9).

This strategy creates an implicit system of threats, incentives, and rewards for companies to reshore (and even to change previous plans, as in the case of GM and Toyota), without using any traditional policy tool: “It will only get higher. Car companies and others, if they want to do business in our country, have to start making things here again. WIN!” (Trump 2017, January 15).

Third, Trump continuously raised expectations of protectionism. Strong rhetoric via Twitter between March and April 2018 blaming what his administration conceive of as “big trade imbalances” and “stupid trade” with the EU and China, was followed in May 2018 by an official investigation under Section 232 of the Trade Expansion Act of 1962 (as in the case of steel) because

the industry's health appears to be threatened by vehicle and parts imports.

The current president continues to focus on the manufacturing sector. Unlike Obama, who wanted to upgrade advanced manufacturing industries, Trump seeks a return to traditional manufacturing sectors that require more workers and fewer skills, such as coal mining, steel, textiles, and cars.

From this perspective, development of the green industry has been downplayed by Trump, in contrast to the strong efforts (and vision) of the previous administration. Several declarations and actions dismantled the system of incentives provided by Obama for reducing carbon emissions and promoting renewable energy-- quitting the Paris Agreement on global warming in June 2017, repealing the 2015 Clean Water Rule concerning water resource management in September 2019; changing how the EPA calculates the health risks of air pollution in May 2019, thereby weakening Obama's Clean Power Plan that restricted greenhouse gas emissions; ending the temporary ban on mining coal and steam protection; and reducing regulations on domestic fossil fuel extraction and the introduction of incentives to revitalize job creation in oil, gas, and coal production (Vakhshouri 2017; Di Tommaso et al. 2019).

Trump's State of the Union Addresses in 2018 and 2019 explicitly mentioned all the above-mentioned priorities, making a full use of his capacity to raise expectations, shape behaviors, and create incentives and disincentives for economic agents. His rhetoric can be seen as simultaneously fulfilling requests for radical anti-globalization and neo-protectionist change by his political base as well as requests for continuity by the strongest interests of American capitalism.

"Americans fill the world with art and music. They push the bounds of science and discovery. And they forever remind us of what we should never forget: The people dreamed this country. The people built this country. And it is the people who are making America great again" (Trump 2018c).

"The agenda I will lay out this evening is not a Republican agenda or a Democrat agenda. It's the agenda of the American people...We must keep America first in our hearts. We must keep freedom alive in our souls" (Trump 2019).

Final Remarks

In this paper we have shown, under what circumstances and in what way the US federal government has intervened in the domestic economy. Since the days of Hamilton and independence from Britain, the US government has played a central role in the nation's economic growth and its industrialization. From the end of the eighteenth century to the first decades of the twenty-first century, the government funded and supported American companies in "strategic" sectors; and these companies have been protected from foreign competition. Protection of infant industries occurred through centuries of US industrialization.

World War I presented an opportunity to consolidate the industrial system through public demand. During the Great Depression of the 1930s, the Roosevelt administration financed public work programs and bailed out many industries, and then redirected the economy to war production. The Cold War

continued government support of industries that promoted national defense.

The Reagan years were a time of deregulation but, in continuity with the past, the government supported science and technology and trade agreements became a central feature of US industrial policy. To save the US economy during the 2008 economic crisis, the Obama Administration used many tools from past US history-- bailouts, public works programs, stimulus packages, and “Buy American” campaigns. These interventions have been driven by *short-term* necessity, but they can also be seen as attempts to look at the *long run*, by trying to promote strategic change in the US economy.

Even in the Trump era, a special relationship between industry and government cannot be denied. Nevertheless, the Trump administration has been characterized by certain elements of discontinuity compared to the last thirty years concerning trade and—more broadly—foreign policy. This is especially true of his rhetoric, which is increasingly accompanied by neo-protectionist slogans and actions.

As stated in the Introduction, despite industrial policy being a contentious issue in academic and policy debates, today we are witnessing a rethinking of the role of industrial policy. Many national and subnational governments target their national industries, as shown by the analysis of US government intervention throughout this chapter. This “industrial policy rejuvenation” (Stiglitz and Lin 2013) is driven partly by the need to find effective solutions to economic and social problems. Industrial policy thus becomes central to achieve societal goals, such as poverty reduction, access to education and healthcare, and environmental sustainability (Bellandi and Di Tommaso 2006; UNIDO 2014; Biggeri 2017; Biggeri et al. 2019).

In normative terms, industrial policy can be seen as an attempt to build better societies, and as a vehicle to achieve broader national development goals (Di Tommaso and Schweitzer 2013). The industrial policy practices common to many governments throughout history (including the US) show how some targets (sectors, regions, firms) can be considered strategic not only because they produce economic growth, but also because they can influence people’s quality of life and their participation in economic and political processes (Di Tommaso et al. 2017).

Conceptualizing industrial policy within a social economics perspective requires taking into account both the extent to which industrial policy is designed and implemented as a leverage for social progress, and the extent to which it is able to make structural economic change socially sustainable.

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