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Gorbachev versus Deng: A Review of Chris Miller's *The Struggle to Save the Soviet Economy*†

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Chris Miller's book is a historian's account of Mikhail Gorbachev's efforts to save the Soviet economy. Miller focuses on the question of why Gorbachev did not follow Deng Xiaoping and did not manage to reform the economy. Miller argues that it was not for the lack of understanding (Gorbachev did invest in learning China's approach to reform and did understand it well), nor for the lack of trying. In fact, Gorbachev did try to implement Deng's agricultural and industrial enterprise reforms. However, Gorbachev's reforms were blocked by powerful vested interests. An inability to tackle the agricultural and industrial lobbies eventually resulted in the bankruptcy and collapse of the Soviet Union. While I generally agree with the political economy argument, I discuss a number of alternative explanations. I also discuss sources of Gorbachev's weak state capacity and offer an evaluation of Gorbachev's and post-Gorbachev reform efforts and mistakes based on the political economy research carried out in the last twenty-five years. (*JEL* D72, O57, P21, P23, P24, P26)

1. *Introduction*

In November 2017, the world marked the one hundred-year anniversary of Russia's October Revolution and looked back at one of the greatest experiments in economic and political history—the journey of Russia through communist revolution, abolition of private property, and construction of a command economy with almost full state ownership and almost complete price regulation and elimination of markets. Some episodes of this journey—however tragic, cost ineffective, and brutal—have awed outside observers. Jospeh Stalin's top-down industrialization has, in fact, inspired academic economists and policy makers around the world. Even though Stalin started World War II as an ally of Adolph Hitler, the crucial contribution to the anti-Nazi coalition's victory legitimized the Soviet Union's status as one of the two superpowers in the postwar era. This is why the final years of the Soviet Union and its rapid disintegration represent a seeming puzzle. Why did an apparently

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powerful economy and polity fall apart so quickly? With all its rigidities and inefficiencies, why would its leaders be unable to fix whatever shortcomings it had and save the Soviet Union?

This question is not an abstract one. The late Soviet Union's failure to reform had an obvious counterfactual—Deng Xiaoping's success. Initially, communist China followed Stalin's industrialization model—both in economic and political terms.[1] However, after Mao Zedong's death and leadership turnover, Deng pushed for more pragmatic policies, gradually introduced adequate incentives (first in agriculture and then in industry)—and put China on a trajectory of fast and sustainable growth. Given that Deng's reforms started a few years before the last Soviet leader Mikhail Gorbachev came to power, why wouldn't the Soviet Union follow Deng's path? Was Soviet leadership incompetent? Unaware of Chinese success? Did they not realize that reforms were needed and needed urgently?

These are the questions at the center of Chris Miller's book, *The Struggle to Save the Soviet Economy: Mikhail Gorbachev and the Collapse of the USSR*. While the author is a historian, the book is, first and foremost, a case study in political economy. And the answer Miller gives to all the questions above is very simple: "It's all political economy, stupid." Gorbachev understood what Deng was doing. He also understood that the Soviet system was not working. But he failed to reform it because he was not able to overcome powerful antireform interest groups.

This argument gets at the core of the conventional story that usually blames Gorbachev for the wrong sequencing of political and economic reform. Deng started with the economic reform keeping the Communist Party in control of politics. Gorbachev started with the political reform. Miller's argument is that Gorbachev had no choice. Without political reform he could not have overcome lobbies' resistance to economic reforms. If anything, in order to succeed, he should have reformed the political system faster and more decisively. This could have opened up opportunities for real, rather than half-hearted, economic reform as well.

1.1 *The Context*

The book opens with Gorbachev's visit to China in May of 1989. The four-day trip was the first Soviet leader's visit to China since 1959; it was planned well in advance and was supposed to demonstrate the long overdue mending of Sino–Soviet relations. Symbolically, the Tiananmen protests had started right before Gorbachev's arrival. Two hundred thousand protesters blocked the square, so the anticipated red carpet reception in Tiananmen was canceled. Moreover, even after the ceremony was relocated to the airport, there was no red carpet there as well—someone simply forgot to arrange it. Even more symbolically, only two weeks after the visit, the Chinese government decided to send the troops to Tiananmen square. As Miller shows, this decision has been very important for understanding the fate of economic and political reforms in the Soviet Union and China.

Where were these two countries in terms of level of development in 1989? In figures 1 and 2, I present Maddison's data on China and the Soviet Union's per capita GDP and its level with respect to the US level. The latter is especially important, as catching up with the West was central to policy makers in both the Soviet Union and China. I rely on Maddison's data as these are the ones that Miller's figures and tables are based on. It is hard to disagree with Miller, who argues (p. xvii) that Soviet data were not informative (being "widely fudged"). Another problem was, of course, that the regulated prices

[1] See a comparison of Stalin's and Mao's industrializations in Cheremukhin et al. (2017a, b).

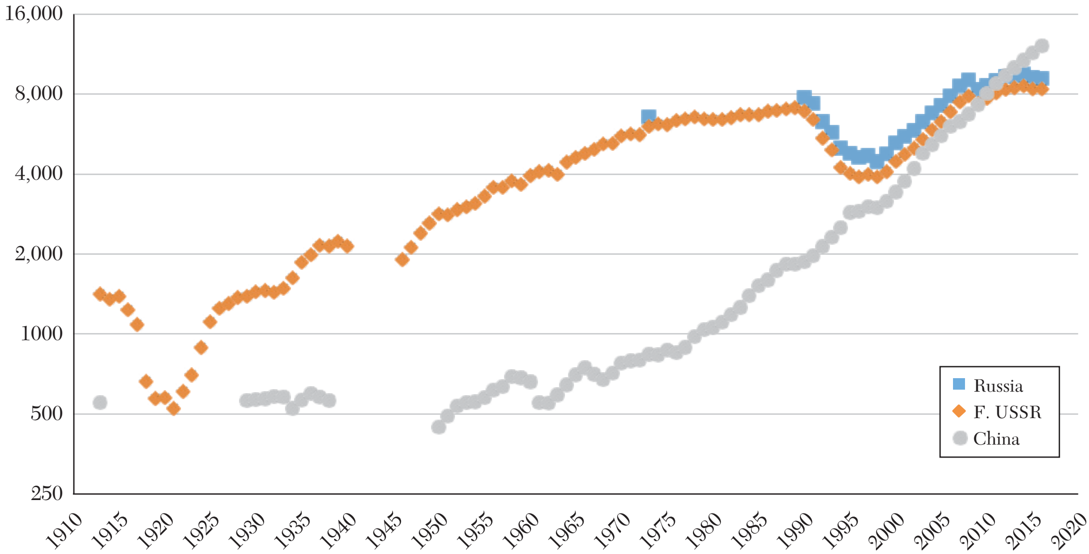

Figure 1. GDP per Capita, Constant International 1990 Dollars

Note: GDP per capita in Former Soviet Union, Russia, and China, constant 1990 Geary–Khamis international dollars.

Sources: Maddison Project (until 2010), World Economic Outlook April 2017 (2011–16, based on growth rates for GDP per capita in international dollars).

distorted the link between GDP per capita and standards of living. In particular, all investments were carried out by the government, and therefore accounted for at cost in GDP statistics; in a command economy, the cost of capital goods could be very far from their market value.

Yet, with all these caveats, Maddison's data on GDP per capita provide a useful context for understanding the evolution of Soviet and Chinese income levels. In 1989, the Soviet Union was a middle income country with GDP per capita at 7,000 dollars (1990 Geary–Khamis international dollars).[2] Soviet GDP per capita had been stagnating since the 1970s: in 1974–89, its average growth rate was below 1 percent per year. In terms of level of development, China was far behind the Soviet Union—by the factor of four!—but was rapidly catching up. In the early 1980s, China's GDP per capita was already growing at 6 percent.

Figures 1 and 2 reveal several features that have dramatic implications for the book. First, the last years of the Soviet Union were not just years of stagnation in terms of GDP per capita, but also—naturally—those of lagging behind the United States. Soviet GDP per capita declined from 38 percent of the US level in the mid 1970s to 31 percent in 1989—the level first reached in the 1930s and not much above tsarist Russia's peak of 29 percent.

Second, in 1989 China's GDP per capita was at 8 percent of the US level—similar to the 10 percent that the Soviet economy had

[2] As Maddison data are only available through 2010, for later years I use extrapolations based on the IMF's World Economic Outlook.

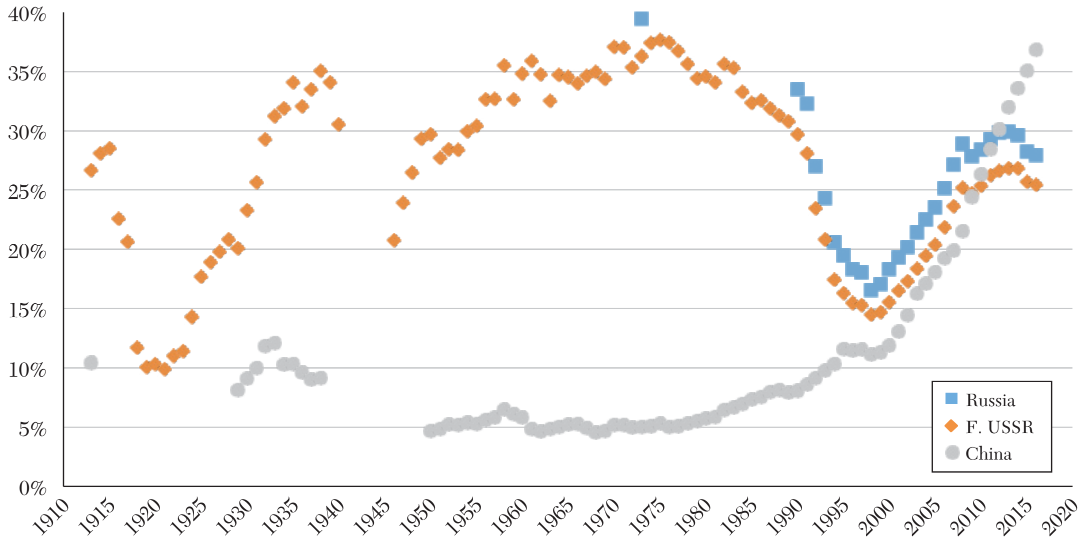

Figure 2. GDP per Capita, Percent US Level

Note: GDP per capita in Former Soviet Union, Russia, and China relative to the US level.

Sources: Maddison Project (until 2010), World Economic Outlook April 2017 (2011–16, based on growth rates for GDP per capita in international dollars).

in 1921 when it embarked on rapid recovery after the Civil War due to the New Economic Policy (NEP). This analogy is especially important as Deng's dual-track policies were in fact quite similar to the NEP, in terms of introducing market incentives on the margin and allowing for private ownership of small-scale firms (in agriculture, services and manufacturing) while keeping large enterprises under state control. NEP was also attractive to Gorbachev as it was considered to be Vladimir Lenin's legacy, later replaced by Stalin's brutal collectivization. Gorbachev's political narrative was critical of Stalin but quite positive toward Lenin.

Third, China today is at the same level of development relative to the United States where the Soviet economy was in the late 1980s. Fourth, in the coming years, the consensus forecasts predict much higher rates of GDP growth in China than in Russia, so Russia will be increasingly lagging behind China.

The first fact explains Gorbachev's willingness to look for ways to reform the economy. The second one suggests that Deng's China once again showed that the NEP was a robust solution to the conundrum of boosting growth without losing political control.[3] This provided a certain degree of confidence that Deng's success can be replicated in Russia. The third observation implies that studying Gorbachev's experience may be relevant for understanding modern China's

[3]In what follows, I am using "NEP" as a reference to the 1920s Soviet economic reforms only and discuss Gorbachev's political reforms separately. The freedom of expression in 1920s and in Gorbachev years was certainly higher than in Deng's China. However, in all these cases, the reformers' intention was never to challenge the ultimate control of political power held by the Communist Party.

challenges. And if China is successful, then a few years later—if and when Russia decides to reform—it will once again be Russia's turn to learn from China. Indeed, the fourth observation implies that China has already covered the ground where Russia is going to be when Russia decides to reform.

1.2 *The Structure of the Book*

The book consists of seven chapters. The first three chapters set the stage for Gorbachev's reforms. In the first chapter, Miller explains the views of the Soviet elite regarding the performance of socialist economies. The Soviet government had at least two reasons to worry. First, as shown above, there was a long stagnation in the Soviet economy that was increasingly lagging behind the West. In 1961, Soviet leader Nikita Khrushchev famously promised that the Soviet Union would complete the basic foundations of communism[4] by 1980; he also promised to catch up with and overtake the United States. This, of course, did not happen. By 1980, Soviet GDP per capita was 57 percent higher than in 1961, but still only 35 percent of the US level, pretty much the same ratio as in 1961 (36 percent).[5]

Second, Miller carefully describes the Soviet views on Eastern Europe, where the Soviet government allowed for limited experimentation with market mechanisms. By early 1980s, these experiments were considered to be a failure. While Eastern European countries continued to enjoy higher living standards than the Soviet Union, their GDP growth turned into the negative territory (p. 17). The Eastern European governments tried to borrow, which resulted in skyrocketing debt (p. 14). In order to repay the debt, these governments had to undertake austerity programs cutting Western imports, consumption, and investment. The most extreme case was Romania, where Nicolae Ceausescu decided to repay the debt in full, plunging his country into outright poverty. In Poland, the decline in living standards resulted in nationwide support for the opposition Solidarity movement (p. 15).

Miller also discusses Soviet experts' views of the West. These were the years of the consensus that the United States was ceding economic leadership to Japan. The other East Asian countries were also enjoying fast growth. This resulted in Gorbachev's "Asia pivot"—increasing interest in Asia by Gorbachev's government. Miller describes the investment in capacity building for understanding the East Asian growth model—with research institutes and ministries creating Pacific divisions (p. 27). When preparing for his July 1986 speech in Vladivostok, Gorbachev told his speechwriters that the Soviet Union should redouble its efforts there as "the civilization is moving toward the Pacific Ocean" (p. 28).

In the second chapter, Miller describes Soviet views on post-Mao China. He shows that Soviet elites had a reasonably accurate and detailed understanding of what was happening there and quite correctly predicted

[4] At that point, "communism" was understood as a society where everyone would contribute to GDP according to his/her ability and would be rewarded according to his/her needs. Certainly this definition was quite vague (as it depended on what the "needs" were supposed to be). However, the very basic consumption needs were still not satisfied in Soviet times: e.g., in 1990 there were 16 square meters of housing per person—half the level in Western Europe and about a quarter of the US level (Hardt and Kaufman 1993, p. 875).

[5] As an *economic* historian, Miller does not discuss another key reason for concern—the comprehensive disillusionment in the system. Hollander (1999) shows that disillusionment in communist values spread widely throughout the society, from ordinary citizens to the elite (with an important exception of the KGB). Hollander argues that disillusionment also had a strong negative effect on political legitimacy and economic productivity. Although he recognizes potential reverse causality (from stagnation to disillusionment), he believes that disillusionment was driven to a great extent by noneconomic factors.

future developments. The Soviet scholars of socialist economies argued that there are important similarities in reform challenges between China and the Soviet Union, and therefore Chinese reforms should be considered a key reform lab for the Soviet ones (p. 51). This was especially true for Gorbachev's close advisors. Even though the think tanks' and advisors' reports on China were not published, they were distributed internally throughout the upper echelons of the Communist Party of the Soviet Union (p. 39). Moreover, it was clear that Gorbachev did read these materials (p. 53).

A key milestone was Gorbachev's speech in Krasnoyarsk in 1988. Gorbachev argued that both the Soviet Union and China were undergoing important reforms and that created a ground for "mutual attraction." It was important that Soviet interest in China's reforms was not limited to the elites—even pedestrians in the streets of Moscow were aware of China's "innovative economic policies" (p. 52).

The third chapter is key to the book's argument. Miller describes the political economy of Gorbachev's Soviet Union. He documents the composition and the incentives of the three main interest groups: the defense industry, agriculture, and energy companies. He argues that each of these groups was very powerful: given the lack of openness and competition, each of these groups was actually a combination of monopolies, their suppliers and customers who greatly depended on their success, and their representatives in the top political cadres. Not surprisingly, Soviet newspeak referred to these as "complexes": the defense-industrial complex (OPK), agro-industrial complex (APK), and fuel-energy complex (TEK) (p. 57). The defense complex was the largest one, accounting for about 20 percent of Soviet industrial output and 75 percent of research and development, employing about 15 million people (about 10 percent of the labor force) and consuming 60 percent of the steel (p. 59).

In the second half of the book, Miller discusses Gorbachev's attempts to take on these groups. Chapter 4 describes Gorbachev's enterprise reforms; chapter 5, his attempts to follow the Chinese model of special economic zones; and chapter 6, his attempts to reform agriculture. Interestingly, these reforms were targeting the very same sectors as the first three reforms of Deng. In all three cases, Gorbachev hoped that the reforms would increase productivity, thus providing more fiscal space and supporting stagnating living standards (p. 71–72). All three efforts were, however, half-hearted and generally failed, especially the ones in agriculture. The latter failure was even more spectacular given that Gorbachev had personal reasons to promote agricultural reforms: his own family experienced Stalin's collectivization (p. 120). However, Gorbachev eventually did not succeed, being opposed by—and fearing—the agricultural lobby.[6]

The final, seventh chapter describes the USSR's fiscal crisis and collapse. As oil prices fell, Gorbachev tried to maintain living standards that resulted in major growth in the budget deficit. Before Gorbachev came to power, the budget was balanced or even had a small surplus. In 1985, the deficit grew to 2 percent of GDP, by 1990, it reached 10 percent of GDP. In 1991, the last year of the Soviet Union, the deficit exceeded an astronomical 30 percent of GDP (p. 152).[7]

[6] Russian agriculture kept stagnating until the early 2000s, when the land market was finally created and Russia became one of the largest grain exporters—after decades of importing grain.

[7] Miller provides a reference to a World Bank report, but warns that these numbers are contested. In addition to the rapid political and organizational change in 1991, the budget data suffered from the notorious Soviet secrecy. When Gorbachev asked then-Secretary General Andropov in 1982 for budget data, the response was: "Not happening! You're asking too much. The budget is off limits to you."

The fiscal crisis was partly explained by a collapse in global oil prices, but was partly handmade. First, Gorbachev's antialcohol campaign reduced revenues from excise taxes. Second, in order to keep the industrial and agricultural lobbies happy, the government continued to subsidize their inputs and raise prices for their outputs. At the same time, in order to pacify the general public, consumer prices were kept low. Gorbachev also avoided cutting expenditures on public goods and tried to maintain living standards. He decided that—unlike Deng—he would not use force to suppress protesters, and therefore tried to avoid the situation where people took to the street to voice their economic grievances.[8]

To fund the deficit, the government resorted to borrowing. The foreign debt increased from 30 percent of GDP in 1985 to 80 percent of GDP in 1991 (p. 152). As the markets were growing increasingly reluctant to lend, the government funded the deficit by printing money. The official prices were still controlled, so the monetization of the budget deficit resulted in "repressed inflation," increased shortages, and higher prices in black markets. Eventually, the Soviet Union ran out of cash and collapsed.[9]

(Miller, p. xvii). Also, in the middle of 1991, Soviet government implemented a threefold increase in regulated prices creating additional challenges for budget statistics.

[8] Miller argues (p. 149) that Tiananmen protests were driven not only by political demands, but also by growing economic tension. The cost of living in large Chinese cities increased by 20 percent in 1988 alone. The Chinese government's ability to suppress mass protests provided it with a stronger hand in bargaining versus the elites and the public compared to Gorbachev. After the Tiananmen crackdown, the Chinese government undertook a three-year program of austerity, reducing both investment and consumption. Without the option to repress the protests, the Soviet government apparently felt constrained by inability to lower living standards; nor it could be too slow on the political change—also demanded by protesters in Moscow.

[9] The non-sustainability of the Soviet 30 percent of GDP budget deficit is especially obvious if one compares it to modern Venezuela's (14–18 percent of GDP in recent years) and Greece's (15 percent of GDP in 2009, the worst year of its recent crisis).

Miller's account shows that both oil price shockas and the impact of the antialcohol campaign were not the major drivers of the fiscal crisis. The main factors were lack of resolve in tackling the interest groups and in maintaining fiscal discipline, as well as incompetence in basic economics.

1.3 *The Methodology*

For an academic economics audience, it is useful to explain what Miller actually does in the book. In recent years, economic history has become much more quantitative (Abramitzky 2015, Margo 2017); economic history papers increasingly turn to advanced econometric methods used in the other fields of economics and are published in general interest economics journals. Miller's book is different. It does not include any regressions. There are only eleven graphs and one table in the book. In this sense, it is a traditional history book with a verbal analysis of a historical episode based on archival documents.

As such, the book is very valuable as the first attempt to analyze Gorbachev's reforms carried out by an academic historian. There have been a number of memoirs on the period written up by reformers and their opponents (with the most important contribution by the top post-Gorbachev reformer, Yegor Gaidar himself (Gaidar 2007)). The contribution of Miller's book is that it is not a memoir, but a solid piece of academic research written by an independent scholar with no stake in the debate. While the author also draws on his interviews of surviving participants of these events (policy makers and their advisors), his main conclusions are based on archival documents, rather than on the key players' recollections provided today. Given the degree of polarization in evaluating Gorbachev's performance, it is quite plausible that recollections are not only imprecise, but also suffering from a self-serving bias (Schacter 2001).

Yet, the interviews are also critical for the book, as they explain the logic behind the reports written by think tanks and individual advisors and help in interpreting the reports' impact. Moreover, by conducting the interviews, Miller has provided an important public good for future researchers, since he asked Gorbachev's advisors questions that are not covered explicitly in their memoirs.[10]

An economist can criticize the book, as it dwells too much on Soviet experts' thinking about the United States, Japan, and China rather than on economic history per se. In this sense, it is as much or even more of a book on the history of economic thought, rather than a book on economic history. But I would argue that the author is right to focus on these issues. As he studies political economy, he must first and foremost analyze what people thought—as politics is eventually driven by perceptions (whether those do or do not reflect the facts). Furthermore, the analysis of perceptions is especially important in a society without reliable statistics and with limited freedom of public debate.

Economists are always suspicious of nonquantitative research, as it is usually not clear whether the results of the analysis are subject to a falsification test. Suppose that the author has a sympathy for Gorbachev and his advisors (which he does seem to have). How do we know that he—consciously or subconsciously—has been unbiased in his choice of interviewees and archival documents to study? Would the results change if the same analysis were conducted by a scholar with different political or personal preferences? Unfortunately, the book pays very limited attention to the other views prevailing at that point. In addition to the arguments of Gorbachev and his conservative opponents from the antireform lobbies, Miller does not discuss the views of subnational leaders and only briefly covers the views of the reformers not connected to Gorbachev (p. 19). Miller only says that all of them were committed to more rapid liberalization (which Gorbachev did not support), but did not agree on a view of who will pay the costs of transition.

A convincing way to address the concerns related to potential biases is to consider alternative explanations and see whether they would be more convincing given the evidence presented by the author and the evidence that is available otherwise. I do this in section 2.2 and conclude that Miller's main argument is still valid, although the alternative explanations are also important.

1.4 *Why Do We Care?*

As with every piece of historical research, we need to start with understanding why it matters. For historians, this is of course a moot point. The Soviet Union was a unique experiment and understanding how and why it disintegrated is a fascinating subject per se. Historians' job is precisely to document such episodes in as great detail as possible. Here, Miller's position strikes an important balance between being sufficiently close to the events to be able to interview the participants and sufficiently distant that he would have no personal connection to the events and could take an objective view.

However, Miller's analysis is also relevant for readers interested in today's affairs. First and foremost, economists now know that history has long shadows (Michalopoulos and Papaioannou 2017); today's political and economic institutions as well as preferences and beliefs may be shaped by events that took place hundreds of years ago. It is clear that the process of disintegration of the Soviet Union has left important traces on today's Russian economics and politics—which in turn are increasingly important not only for Russia's neighbors but for the world in general as Russia has reemerged as a major geopolitical player.

[10] The opportunities to ask such questions are unfortunately perishing every day. While I was writing this essay, Anatoly Chernyaev, a key advisor to Gorbachev and one of Miller's most important interviewees, passed away.

The book is published in the "New Cold War History" series. The publishers apparently had in mind the new interpretations of the history of the Cold War ("New History of the Cold War"). Ironically, as the book was being written the world walked into a "new cold war" so this book will also contribute to the "History of the New Cold War." These two angles are not independent: many events unfolding today have roots in the failures of 1980s and 1990s when—as many Russians seem to believe today—Soviet and Russian leaders (as well as their Western counterparts) could have done a better job. These failures were especially salient against the backdrop of China's reforms and its stellar economic performance.

Second, understanding Soviet problems of the late 1980s can be relevant for addressing modern China's challenges. Miller argues (and I agree with him) that Deng's job was easier than Gorbachev's because China was uniformly poor and therefore its political economy was less complex.[11] Nowadays, however, China's per capita income is at the same level of development relative to the United States as the Soviet Union was in the 1980s (figure 2). Despite privatization and impressive market reform in the last forty years, the Chinese economy is dominated by large state-owned enterprises and state banks. They naturally form powerful interest groups against reforms. The officials talk about the growing imbalances and the need for painful "supply-side structural reforms," but no specific steps have been announced yet. At the same time, the top leadership seems to understand that it cannot afford reducing household income levels and therefore avoids deflating financial bubbles, relying instead on piling up debt. Whether or not another Tiananmen-style crackdown is a credible threat is not clear; however, judging by increasing control over information and civil society, the government is conscious of the risk of protests and wants to prevent them in the first place.[12] The Chinese economy is certainly much more flexible and competitive than the late Soviet one. Yet, the political economy parallels are striking.

Third, similar reforms are still to be undertaken in many other countries with dominance of the public sector both with a communist past (such as Belarus, Kazakhstan, or Uzbekistan) and without (e.g., Algeria or Egypt).

Finally, there are also increasingly common comparisons of the USSR to the European Union. They of course come from voices far from academic mainstream. But even if these comparisons are not fair, it is clear that the European Union does need to reform, does have powerful antireform interests, and therefore can indeed learn from Gorbachev's years.

The book is an important illustration of the so called "Herbert Stein's law": if something cannot go on forever, it will stop. While this law was coined to describe the balance of payment crises in Latin America, the Soviet Union is probably the most remarkable piece of evidence to support this law. Until the very end of the Soviet Union, it was impossible to imagine that it could fall apart; but then it just did.[13] Since the Soviet Union could neither continue without reform nor could it reform, it simply had to stop.

[11] This argument is certainly not new (e.g., see Sachs and Woo 1994).

[12] King, Pan, and Roberts (2013) show that Chinese internet censorship first and foremost targets calls for collective action rather than criticism of the government per se. Also, Cantoni et al. (2017) show that Chinese government has made major (successful) efforts to redesign the school curricula to shift students' beliefs in the nationalist direction—away from liberal and pro-Western views.

[13] The title of Yurchak's (2005) history of the late Soviet Union says it all: *Everything Was Forever until it Was No More*.

2. *The Main Argument of the Book*

2.1 *Why Did Gorbachev Not Follow Deng?*

Why did the Soviet Union not reform? Miller's preferred answer to this question is political economy. Chapter 3 opens with Gorbachev's quote: "It is the politics that follows economics, and not vice versa." While the idea that the "social being determines consciousness" has been one of the basic tenets of Marxism–Leninism (and thus was learned by heart by every Soviet student), this statement was especially misleading in the late 1980s. The main barriers to Gorbachev's economic reforms were, of course, political.[14] The Soviet economy was dominated by powerful interest groups related to the defense industry, energy companies, and agriculture. These lobbies were interested in preserving the status quo. Even an omnipotent General Secretary of the Communist Party could not have crushed them. Miller (p. 59) cites a conversation between Gorbachev and Gosplan's head Nikolai Baibakov showing their understanding that cutting the military budget would result in their "dismissal."

How do we know that Gorbachev did not overestimate the power of the incumbents? In most historical narratives, such a question is difficult to address. After all, the threat of coup d'etat is normally an out-of-equilibrium threat. However, in the case of the Soviet Union, it is a much more straightforward issue. At the end of the day, Gorbachev was indeed removed by a coup in August 1991. And if not for the unprecedented courage of Yeltsin and his supporters, the coup (led by the very three vested interests listed by Miller) could have prevailed. Moreover, half a year before the coup, Gorbachev's close ally Shevardnadze (then Soviet Union's foreign minister) resigned with a public warning that a coup was coming. Just two months before the coup, the CIA's presidential intelligence estimate listed a (successful!) coup by hardliners as one of four plausible scenarios for the USSR (Plokhy 2014). Daniels (2007, p. 416) also says that American Sovietologists expected the coup and were only surprised by its "ignominious failure."

Even if Gorbachev did not expect a coup and did not believe such warnings, he could not have neglected the fate of another Soviet reformer, Nikita Khrushchev. Ironically, in addition to denouncing Stalin's political legacy, Khrushchev also attempted to implement NEP-like—and hence Deng-like—reforms. As described in Markevich and Zhuravskaya (2011), Khrushchev tried to introduce M-form hierarchy in a U-form state, creating yardstick competition between the regions. Essentially, this would introduce a Soviet version of "federalism, China style" that has been one of the key pillars of post-Mao's success (Qian 2003; Jin, Qian, and Weingast 2005). This reform would shift economic power toward regional authorities and therefore greatly weaken the central party's apparatus. The reform was not designed well; the initial conditions were also very different from those in China. The reform was rejected by the incumbents; in 1964, Khrushchev was ousted.

The sheer power of the antireform interest groups is certainly only a part of the answer. If the reforms were to improve joint welfare, there should have been a way to negotiate a win–win deal with the interest groups. The design of such win–win reforms was precisely the essence of the so-called "dual-track liberalization" introduced by Deng. The dual-track system was first implemented in agriculture (as the "household responsibility

[14] One of the leading advisors to Polish and Russian reformers Jeffrey Sachs (1993, p. 3) insisted: "The hardest part of the transformation, in fact, will not be the economics at all, but the politics." The political reform in East European countries was certainly less challenging than in the Soviet Union due to the post-imperial nation building drive and the EU accession anchor. An additional factor was a much stronger dissident movement and civil society that helped build stronger democratic institutions after transition (Bruszt et al. 2012).

system") and then in industry (as the "contract responsibility system"). The gist was to keep the old plan targets in place, but provide market incentives on the margin. The producers had to supply the planned production quotas at regulated prices; but whatever they produced above the quota, they could sell in the market at free prices. Such a dual-track system preserved the interests of incumbents (who received the planned amounts of their inputs at regulated prices), but also improved marginal incentives and therefore productivity.

Miller shows that Gorbachev and his advisors were keenly aware of the dual track's success in China. Why couldn't it be reproduced in the Soviet Union? Miller's argument is that it was not for the lack of trying. The book's chapter 5 shows how the creation of special economic zones was an attempt to build a second track on top of the existing system. More importantly, chapters 4 and 6 show that Gorbachev did try to introduce the hybrid regime in industry and agriculture. However, the dual system only works if the government has the capacity to enforce its rules. Unless there is common knowledge that the rules will be enforced, the enterprises are no longer confident that their suppliers will respect the quotas and deliver the planned quantities at regulated prices (which are below market prices). Therefore, the enterprise managers will expect the need to purchase their inputs at market prices and will themselves know that they must sell all their output at market prices as well—simply in order to be able to pay for the inputs. Thus the system collapses. This was predicted in Murphy, Shleifer, and Vishny (1992) and described post mortem in Blanchard and Kremer (1997).

Gorbachev's problem was that he had to reform the economy when the state capacity to commit and enforce was weak. This was not a coincidence. The very realization of the need to reform was driven by the widespread disillusionment in the Soviet system—which in turn undermined the legitimacy of the party and its ability to enforce the rules of the game and to deliver on its commitments.

In democratic countries, the state capacity is driven by the strength of the democratic institutions. The social contract supporting reforms can be enforced even if the incumbent party is gone. If the reforms impose short-run costs, the losers may still accept the deal, as they know that they will enjoy the benefits later. The democratic checks and balances assure that these benefits will be delivered and not expropriated by the future rulers. In most nondemocratic regimes, it is impossible to commit to redistributing the benefits of the reforms;[15] those unhappy with their living standards are kept in check by the threat of repression.

Gorbachev's government did occasionally use force (the most prominent examples being Tbilisi in 1989, Baku in 1990, and Vilnyus in 1991). It is still not clear whether these crackdowns were directly ordered by Gorbachev. However, in his later years in power, it was becoming increasingly clear that Gorbachev did not want to use force against a major protest in Moscow—or would not be able to. The protests against the Communist Party brought hundreds of thousands to the streets of Moscow in 1990 and early 1991. In personal conversations, Gorbachev argued that he was always against shooting at peaceful protesters. But the events in August 1991 (during the anti-Gorbachev coup) also showed that soldiers would not necessarily shoot at protesters even if ordered to.

Whether for the lack of willingness or for the lack of capacity, Gorbachev did not have

[15] Djankov et al. (2003) argue that the main challenge in a dictatorship is to build the commitment not to expropriate. Besley and Kudamatsu (2008) show how such commitment devices are created in successful autocracies (including China!) where the system manages to mimic the checks and balances similar to those in democracies with rule of law.

an option to exert violence; therefore, he had to maintain living standards. Similarly, he could not negotiate a credible arrangement with all the interest groups (generals, collective farm managers, industrial managers). They understood that Gorbachev would not be able to commit to future payments. Hence, they did not want to agree to a required fiscal adjustment. This is why Gorbachev's government embarked on a path to inevitable bankruptcy. Miller calls this approach "Chinese-style reforms without Chinese-style budget discipline." After all sources of revenues—borrowing, printing money, and raiding household deposits in the state banks—had finally been exhausted, Herbert Stein law took its toll.

2.2 *Alternative Theories*

As a political economist, I find the argument above very compelling. However, other economists and social scientists may think of Miller's narrative as "a theory," rather than "the theory," of Soviet collapse.

First and foremost, even if one accepts Miller's political economy argument, it is not immediately clear whether his categorization of interest groups is correct. Why and how does he arrive at the "unholy trinity" of TEK, OPK, and APK? Miller describes the size of OPK (pp. 59–60), but not of the other two—and not of other potential lobbies. Given the centrality of the TEK–OPK–APK story to the book's argument, it is striking that the justification of the choice of the three as the main powerful antireform lobbies is based on a single reference to page 157 in a book edited by Ellman and Kontorovich (1998). The latter is a compilation of essays of 1990s reform insiders. Page 157 is a part of Yevgeny Yassin's essay, which describes the "'Radical' Economic Reform, 1987–1989" saying:

> The government was afraid to tread on the privileges of three powerful blocs: the Fuel-Energy Complex, the Military-Industrial Complex, and the Agro-Industrial Complex. It hesitated to infringe upon the interests of any social force no matter how essential such moves were to stabilize the economy. Perhaps there was some feeling of goodwill: 'We want to make everyone happy, so everyone should also make everyone else happy, and everything will turn out fine.'

This essay does not justify the choice of the three "powerful blocs." Nor is this choice discussed in other essays in the book.

Overall, even though the choice of TEK, OPK, and APK is reasonable, there is a question regarding two other potentially important interest groups. First, there was the central party apparatus that resisted Gorbachev reforms as it saw him threatening their grip on the political system. Gorbachev understood it very well. Daniels (2007, p. 358) describes Gorbachev's early June 1986 meeting with intelligentsia where Gorbachev openly refers to the "apparatus that broke Khrushchev's neck and . . . will break the neck of the new leadership." This group was adjoined by security services (first and foremost, the omnipotent KGB) that until the very end held up the ideological beliefs in their mission and rejected any "revisionism" (Hollander 1999, chapter 6). The party and the KGB's main interest was, of course, the preservation of the system; both understood that the reforms would destroy the status quo. The successfully resisted Khrushchev; they also played an active role in the 1991 coup. It is not clear whether a Coasian compromise could be achieved with the ideological core of these groups.

Finally, there was yet another lobby that played a key role in the disintegration of the Soviet Union. The latter—at least nominally—was a "federation" of fifteen ethnic republics (including Russia, which accounted for half the population and two thirds of the territory). Once the republics' elites understood that the central government may lack resources to fund the status quo, the secessionist drive accelerated—in the fourteen non-Russian republics as well as in Russia proper. Each republic's elite effectively represented a powerful lobby whose interests fundamentally differed from those of the Soviet government (Plokhy 2014, p. xxxii, 50, Daniels 2007, p. 416). This was aggravated by a personal conflict between Gorbachev and Yeltsin (whom Gorbachev fired from the influential position of the head of Moscow's party committee in 1987). On the other hand, this conflict was underpinned by the objective divergence of interests, as it was increasingly becoming clear that the central government did not have resources to buy out subnational lobbies—and lacked the enforcement capacity to stop them by force. Once again, this was not for the lack of trying. While Gorbachev's government never used (or never dared to use) force in Moscow, it repressed protests (both peaceful and violent) in Tbilisi (1989), Novyi Uzen (1989), Fergana Valley (1989), Baku (1990), Dushanbe (1990), and Vilnyus (1991). However, by 1991 it became clear that further violence can only backfire.

Gorbachev understood this and tried to negotiate a decentralization deal (the "Union Agreement") in 1991. Stanislav Anissimov, the last Soviet Minister of Material Resources, provides a fascinating account of these negotiations (Aven and Kokh 2013, p. 178–184). He describes the Coasian bargaining among the republics' leaders, who literally sat around a table on August 9, 1991, and formulated their demands that the Soviet center could not commit to satisfy. Moreover, even as Gorbachev promised to stick to the Union Agreement, two days before signing the Agreement, he was arrested by the coup team (the "State Committee for Emergency Situation"). The coup then failed and subnational leaders discovered that they could get much more power than Gorbachev would ever offer them with this agreement.

Let us also discuss other alternative explanations that are not related to political economy. I will use Banerjee and Duflo's (2012) instructive categorization of "three I's" common barriers to reforms: ideology, ignorance, and inertia.

Inertia was certainly important. The Soviet government and Soviet public understood that the system was rotten but did not believe that it could collapse. Their views were consistent with the enormous resilience of the system that survived huge shocks for seven decades (p. 147). The World War II victory and forty years of postwar domination as one of two world superpowers could have misled the elites into believing in the indefinite viability of the Soviet model. This argument features very prominently in the key predecessor of Miller's book—*Collapse of an Empire* by Yegor Gaidar (Gaidar 2007). Gaidar refers to multiple documents proving that until the very end, the Soviet ministers could not comprehend that the economy was doomed. Soviet leaders were not alone: international financial markets kept lending to the Russian government; in 1989 the interest rates were similar to those of Belgium, Canada, Portugal (p. 147).

This had major implications for understanding the diverging trajectories of China and the Soviet Union as this difference in the initial conditions translated into a major difference in expectations. When Deng started his reforms, China was a very poor and rural country; Deng's main aspiration was to avoid famine. Chinese households did not expect to catch up with the West any time soon. They also understood that economic growth was crucial to achieve whatever patriotic or nationalist aspirations for returning China to the world stage.

Gorbachev's Soviet Union was a middle-income country with very high rates of literacy, urbanization, and industrialization—and a superpower on par with the United States. This convinced its citizens that the USSR could not have been too far behind the West.[16] Interestingly, the complacency contributed to polarization of attitudes to the reforms. The interest groups themselves did not realize the urgency of the reforms—as status quo seemed sustainable. On the other hand, radical reformers believed that the reforms could deliver Western living standards very quickly and considered the dual-track approach too gradualist (p. 19). Such polarization was certainly not helping to build a coalition for Gorbachev's reforms (see Frye 2010 for a general discussion of the negative impact of polarization on reforms in post-communist countries).

Ideology was also important. Miller acknowledges that Soviet leadership was committed to ideology much more than their Chinese counterparts. Miller says: "To this day, Gorbachev believes in socialism" (p. 20).[17] Ideological constraints do limit both the design and the implementation of economic reforms. On the other hand, Miller also shows how a skillful politician can use ideology to promote the reform. While Deng famously said "it doesn't matter whether a cat is white or black, as long as it catches mice," he did not dispose of the communist ideology openly. Deng maintained Mao's cult to keep the left-wing conservatives happy.[18] At the same time, he did pursue the reforms that were perfectly inconsistent with Mao's views.

Another simple—but undoubtedly realistic and powerful—explanation is the sheer *incompetence* of Soviet elites. In economics, we always assume that economic agents are rational and fully understand the implications of their actions. However, the Soviet system has trained generations in outdated and ideological social science theories and carried out leadership selection based on loyalty rather than intellectual achievement. This certainly did not promote the leaders' ability to understand market economics and even the importance of macroeconomic stabilization.

On page 153, Miller refers to Kim's (2002) data on monetary emission—taking off from 0 in 1985 to 60–70 billion rubles (about 8 percent of GNP) in the late 1980s.[19] This resulted in repressed inflation (as consumer prices were still controlled), skyrocketing black market prices, even higher shortages, inevitable rent seeking, and disintegration of law and order. Bennet (1994), Boycko (1992), Osband (1992), and Shleifer and Vishny (1991) showed that monetary financing of budget deficit in a system with fixed prices had major adverse real effects. The increased shortages due to repressed inflation brought up queuing and reduced labor supply.[20] The botched efforts to address this issue (in particular, the infamous "monetary

16 High expectations explain why Gorbachev is now so unpopular in Russia. Miller says that "Russians regularly rate Gorbachev as one of their worst leaders of the twentieth century" and refers to a recent poll where only 22 percent of Russians have a positive or somewhat positive opinion of Gorbachev—while 66 percent have a negative impression (p. 6). Stalin and Brezhnev enjoy much more support in this poll. In 1996, Gorbachev ran in the presidential elections and obtained only 0.5 percent of the vote (finishing seventh out of eleven candidates). Already in February 1991, Soviet citizens believed that Gorbachev was both "hypocritical" and "weak" (Dubin, Gudkov, and Levada 2008, p. 78).

17 I had the very same impression from my private conversations with Gorbachev in 2009. It is important to emphasize that "socialism" here is not a Swedish or French model, but a 1980s' Soviet "socialism with a human face" with the NEP economic model and freedom of speech and possibly some democratization (Daniels, 2007).

18 Another important implication of Deng's commitment to the cult of Mao was that no other politician (including Deng's successors) could have built a new personality cult. This—at least until recently—has helped to preserve some checks and balances, regular leadership rotation, and certain degree of meritocracy that are crucial for the efficiency of an autocratic regime (Besley and Kudamatsu 2008).

19 As an example of the lack of understanding of the basic rules of monetary economics, Miller quotes the speaker of the Russian parliament (a professor of economics since 1980) who believed that "more money resulting in more production" was an "iron law of economics" (p. 65).

20 Interestingly, Maduro's Venezuela does not seem to have learned these lessons.

reform" carried out the government in 1991) only reinforced the public's suspicion of the government's inability to address the problems and increased the panics (with further negative impact on the real economy).

Another important dimension of incompetence was the Soviet leadership's preoccupation with industry and misunderstanding of the key role of services. When comparing the success of Japan relative to the United States, Soviet thinkers were certain that deindustrialization of the American economy was tantamount to its decline and did not appreciate the importance of knowledge-based service sectors for value added and growth. Not surprisingly, the share of services in GDP was much lower than in countries at a similar level of development until the mid-1990s (figure 3). The focus on industry of course provided additional clout to the three antireform lobbies.

Miller does not directly reject the incompetence argument, but his discussion of all the Soviet leadership's learning of reforms in the West, Eastern Europe, Japan, and China shows that the leadership did recognize the risks and was genuinely interested in reform models. Nonetheless, I think this debate is not settled yet and future historians will try to figure out the importance of the leadership's economic incompetence during the last years of the Soviet Union. One forceful argument in support of the key role of incompetence is the effort by then-Secretary of State George Shultz to educate Gorbachev in basic economics. Oberdorfer (1998) describes how Shultz, an "economics professor turned diplomat," thought that it is worth investing a lot of time in delivering "informal seminars" in modern economics for Gorbachev. Given the high cost of his time, this is a revealed preference proof of Shultz's belief that Gorbachev lacked good economic advisors.

There is also a possibility that the fiscal shock was just too large for the Soviet Union to survive. Miller does refer to both the collapse in oil prices in mid 1980s and Gorbachev's antialcohol campaign (pp. 62–64) and argues that these two fiscal problems alone were not sufficient to bankrupt the Soviet Union. He refers to Sinelnikov and Reznikov (1995), who show that most of the increase in budget deficit is explained by growth in military spending, in public investment, and in reducing the taxation of enterprise profits (essentially, payouts to the industrial lobbies). The antialcohol campaign increased the budget deficit by only about 1 percent of GDP. The budget's revenues from foreign economic activity declined by 2 percent of GDP.

The oil prices were, of course, not controlled by the Soviet government, but the decision to launch the antialcohol campaign was a conscious political decision. Was this a miscalculation? While it was clearly a major contributor to the fiscal crisis and therefore the collapse of the Soviet Union, the decision was not irrational. Contrary to the conventional wisdom, it was not an ad hoc move by a (teetotaler) Gorbachev who did not understand the economic and political implications. Even before Gorbachev came to power, the Politburo was already planning an antialcohol campaign, as it was clear that the cost of alcohol epidemics to health and productivity was very high and growing.[21] There is now a consensus in the demographic and economics literature that the antialcohol campaign did increase the life expectancy of Russian men; its reversal in 1990s, correspondingly, resulted in a sharp spike in middle-age male mortality and decline in life expectancy (Shkolnikov and Nemtsov 1997; Treisman 2010; and Bhattacharya, Gathman, and Miller 2013.) Overall, Gorbachev's government was

[21] In our private conversations in 2009, Gorbachev did confirm a growing support for an antialcohol campaign within the Politburo even before he came to the office; it is also not true that Gorbachev is a teetotaler.

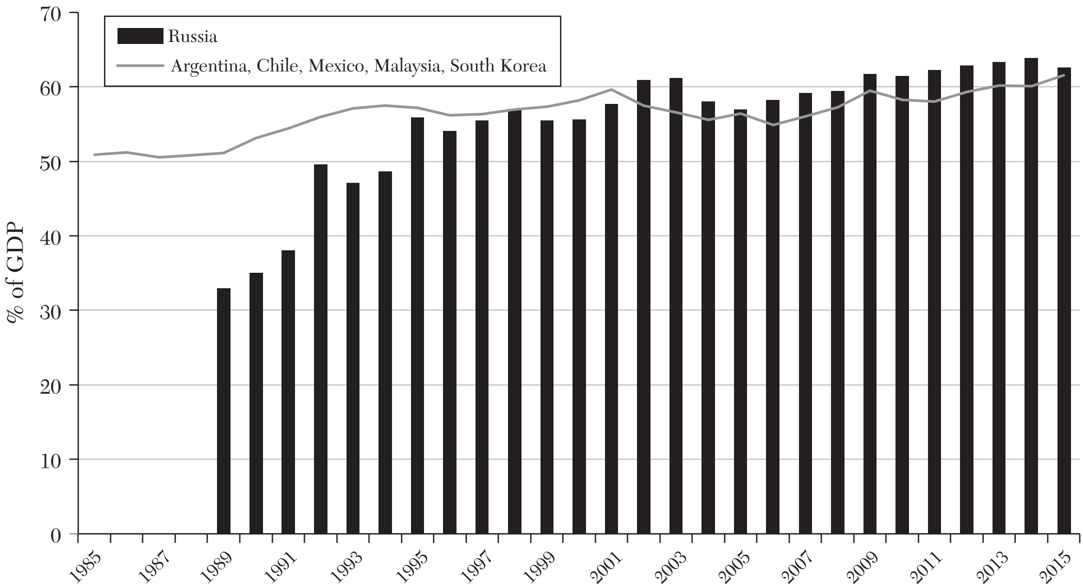

Figure 3. Share of Services in GDP in Russia and Emerging Markets with Comparable GDP per capita

Note: Unweighted average.

Source: World Bank, OECD

prepared to pay the (moderate) fiscal cost of this decision. This in turn shows that—at least initially—the government did not deem the fiscal challenges to be insurmountable. Indeed, only in 1990 and especially in 1991 did it become clear that the budget deficit had gotten out of control. Certainly, it was not due to the decline in oil prices or antialcohol campaign, but due to continued half-hearted policies of delaying reforms and budget cuts.

Given the discussion above, I would conclude that the "three I's" and the political economy of federalism are all important elements of the story and must be taken into account when we analyze the Soviet experience—and its lessons for future reformers. But Miller's OPK–APK–TEK resistance to reforms is still an important element of the story. Gorbachev did understand China's approach to reform. He did try to reform—even though his reforms were half-hearted. He did realize the importance of the vested interests and tried tackling them—as well as circumventing them. He, however, failed because he lacked state capacity and resources.

Miller's argument implies it was just too late to reform. How do the alternative explanations above impact this verdict? Inertia and the power of subnational interest groups made Gorbachev's job even harder. On the other hand, if ideology and incompetence played the central role, a more flexible and more competent reform team could have done a better job. I discuss these issues in the next section—after surveying recent empirical literature on the political economy of reforms.

3. *History, Political Economy, Economics, and Alternative History*

3.1 *Connecting History to Political Economy and Economics*

Reviewing a noneconomics book always helps one to understand how much—or how little—economics can contribute to a debate in a neighboring discipline. The main focus of the book is on late-Soviet thinking on policy reform. Miller shows that Gorbachev's advisors did try to familiarize themselves with the economic developments in the West and in the East—and with economic research available at the time. It is striking how limited the economic knowledge of the institutional reforms and political economy was at that point, and how much relevant research has been conducted since then. How would Soviet policy makers' views change if they were aware of the research available today? This is an important discussion missing in the book (Miller only refers to a couple of the relevant economics papers). This is why I think it is worth surveying at least some work that has appeared in the last twenty-five years. Since this literature is huge, I will only refer to a few papers that have direct relevance for the book's main narrative.

Even though Gorbachev's reforms seem to have happened recently, in late 1980s economists still had not operationalized the formal modeling of interest group politics. The seminal "Protection for Sale" paper by Grossman and Helpman only came out in 1994. While they were modeling political economy of trade protectionism, their theory turned out to be perfectly suitable for describing interest group politics of any nature.

Political economy of trade liberalization has also inspired the pioneering work of Fernandez and Rodrik (1991), who explained why reforms that are supposed to benefit a majority can be rejected by a majority vote. This happens when the ex post allocation of gains from reforms is uncertain—thus the antireform coalition may be large enough to block the reforms. This model underlines the importance of the clear vision of reform outcomes and commitment to their implementation.

The importance and, in some cases, impossibility of commitment in politics was also described in Acemoglu (2003). If there are no strong political institutions, the Coase theorem may not apply. Indeed, consider a situation where political change increases the joint surplus; if there were commitment, the Coase theorem would imply that there could be a win–win scenario where the political challenger can pay the incumbent for agreeing to leave. However, in the absence of political checks and balances, the successor will expropriate the former incumbent ex post, thus undermining the latter's ex ante consent to the deal.

This "winner takes all" feature of nondemocratic politics is one of the key lessons from post-communist transition. Hellman (1998) and Frye (2010) describe this phenomenon to explain why countries with stronger democratic institutions and less polarized societies (Central and Eastern Europe) have been more successful in promoting reforms. The European Bank for Reconstruction and Development (2013) shows that in the post-communist region, there is a robust correlation between democracy and economic reforms.

Interestingly, economists studied the implications of "winner takes all" in the late 1980s and early 1990s. Miller shows that the Soviet elite were preoccupied with the West and the East, but did not pay enough attention to the experience of Latin America, which turned out to be very relevant. These were the Latin American crises of the 1980s that drove the academic thinking about reforms at that time—especially the research on political economy of macroeconomic stabilization. Alesina and Drazen (1991) modeled the interaction between two interest groups that faced the need to balance the budget as a war of attrition. In their theory, the two groups understand that delaying macroeconomic stabilization is costly for both (due to high inflation). But in order to cut the budget deficit, one group has to give up. There is no interim solution: the winner takes all. Hence the winner cannot commit to compensating the loser. The stabilization therefore gets delayed. (It is indeed striking how a paper published in 1991 perfectly predicted the delayed macroeconomic stabilizations in post-Soviet Russia and many other post-communist countries).

The analysis of the political economy of Latin American reforms culminated in the so-called Washington Consensus (Williamson 1990). Interestingly, while the Washington Consensus has been traditionally blamed for focusing on macroeconomic stabilization, price liberalization, and deregulation, Williamson's original ten-point list also included the need for enforcing property rights, broadening the tax base, funding social safety nets, and human capital. In this sense, the Washington consensus already recognized the importance of building institutions and taking into account the political economy considerations.

However, it was exactly the experience of the post-communist and Chinese transition that propelled institutional economics and political economy to the center of the analysis of reforms (Roland 2000, Sonin 2013). These events gave rise to the large literature on the importance of the political and economic institutions (and the interaction between the two), the success of the dual-track reforms in China, and the rapid disintegration of the Soviet production system. One of the main takeaways of that literature was the importance of understanding the difference in political institutions in the Soviet Union and China. For example, Blanchard and Shleifer (2001) argued that the reason why federalist reforms failed in Russia but succeeded in China was the presence of the functioning central party.[22] By the time Gorbachev started his reforms, the Communist Party of the Soviet Union had already lost legitimacy while in China the party was—and still is—a credible political institution. As argued in Besley and Kudamatsu (2008), this is at least partially explained by Deng's ability to install meritocracy and regular rotation within the party. Since Deng, Chinese leaders have served only two five-year terms each—while in the Soviet Union the leader's job was supposed to be for life.

Another important part of the literature focused on multiplicity of equilibria. In these papers, the failure of the reforms is not predetermined by initial conditions (or historical legacy), but was one of several potential equilibrium outcomes. For example, Johnson, Kaufmann, and Shleifer (1997) showed that under the same constellation of parameter values, a transition economy could end up in a "good" equilibrium with broad tax base, small informal sector, and high quality of public goods and a "bad" equilibrium where firms prefer to move to the informal sector, taxes are not collected, and public goods are not provided. Essentially, this theory—inspired by the transition experience—preceded the influential work by Besley and Persson (2011) on the sources and implications of the state capacity. Johnson et al.'s model of endogenous state capacity implies that even if China and the Soviet Union have similar fundamentals, they may end up in strikingly different politico-economic equilibria. And, as both equilibria are stable, switching between the two equilibria is very hard. As China begins the transition with strong state capacity, it is likely to preserve it. On the contrary, since the Soviet Union (or

[22] Enikolopov and Zhuravskaya (2007) use cross-national data to show the need of strong national parties for a successful fiscal decentralization.

Russia) have no state capacity to start with, it is very hard to escape the "bad equilibrium."

Similarly, there can be multiple equilibria in terms of the quality of market institutions. Boycko, Shleifer, and Vishny (1995) argue that the political support for property rights can only come from private owners. Without privatization, there are no interest groups supporting the creation of modern market institutions. On the other hand, if privatization is carried out before the market institutions are created, the assets end up in the hand of politically connected "oligarchs." If the secondary markets functioned, this would only be a temporary problem, as more efficient owners would take over the assets from the original privatizers. However, if the market institutions are not developed, more productive owners have no access to finance to buy the assets; moreover, the technically competent owners may not be able to run the assets better than the oligarchs, as the political connections are more important than the managerial efficiency. Sonin (2003) provides a formal model of this argument and shows that there may be multiple equilibria. A good equilibrium is characterized by protection of property rights and productive investment while a bad one is where the rich engage in rent seeking—the latter pays off better than investment. The bad equilibrium is characterized by high inequality and emergence of oligarchs. Guriev and Rachinsky (2005) carry out an empirical analysis of the emergence and productivity of Russian oligarchs. They show that in early 2000s, the concentration of ownership in Russian industry was very high and the largest owners were indeed the oligarchs benefiting from privatization of natural resource industries and political connections. This situation is qualitatively different from other countries: as shown in European Bank for Reconstruction and Development (2016, p. 19), nowadays only in post-Soviet countries does the majority of billionaires' wealth comes from natural resources. In all other developing regions of the world, natural resources account for 10–15 percent of billionaires' wealth; in the advanced economies the respective percentage is in the single digits. Natural resource rents are of course easily taxable with minimum distortion; the prominence of natural resources as a source of private wealth points to the capture of the state institutions by the rich—which results in shifting of the tax burden toward other, more distortionary ways of funding the state budget.

Guriev and Rachinsky (2005) do find that the oligarchs were more productive than other private owners, which is consistent with the "institutional economies of scale" argument: the bigger the business empire, the easier it is to influence courts, media, and politics and eventually obtain protection from competition and preferential treatment. This creates the "Medici vicious circle" (Zingales 2017) where economic and political power reinforce each other. This underperformance of non-oligarch private owners is also consistent with the overall failure of Russian privatization to improve productivity of privatized firms—which in of course undermined the political legitimacy of market reforms.[23]

The multiple equilibria argument even extends to the evolution of values and preferences. Aghion et al. (2010)—also inspired by the transition experience—develop a model that explains why in many countries,

[23] Brown, Earle, and Telegdy (2006) carry out a panel analysis of productivity of state-owned and privatized firms in four transition countries and show that only in Russia has privatization resulted in a decline in productivity; later, in the early 2000s, private firms caught up with those remaining in state ownership (Brown, Earle, and Gehlbach 2013). Guriev and Megginson (2007) survey all available empirical studies on the impact of privatization on productivity (including both transition and non-transition countries) and show that only in Russia and in the Czech Republic has privatization decreased productivity of the privatized firms. In all other countries (including China), privatization has had a positive impact on productivity.

voters support a high degree of regulation even when they know that the government is corrupt. In this model, a "civic" behavior pays off in a society where businesses also behave in a civic way and there is no need for overregulation and bribe extortion. Therefore, there are two stable equilibria: one with a high level of trust, civicness of business, and reasonable regulation (and hence no scope for bribe extortion) and the other one with low trust, greedy businesses, and support for government overregulation of business (and hence higher corruption).

Finally, the comparisons of the Soviet Union and China in the late 1980s should be viewed in the light of the recent "middle-income trap" literature (see a recent survey in Asian Development Bank 2017). These papers suggest that low-income and middle-income countries face different development challenges. The poor countries (such as China in the late 1970s and 1980s) should focus on rural–urban reallocation and a building industry based on cheap labor and capital *investment*. At the same time, the middle-income countries (such as the Soviet Union in 1980s or China today) are too close to the productivity frontier to rely on adopting technologies developed by others. The middle-income countries should develop political and economic institutions that promote *innovation,* rather than imitation of new technologies. These institutions require competition and openness—and freedom of entrepreneurship. The literature argues that such institutions are not compatible with suppressing dissent. The literature also shows how many countries have gotten into the middle-income trap by delaying the shift from the "investment" to the "innovation" model. The quintessential example of success is South Korea which—faced with the crisis in the late 1990s—managed to make this change. The Soviet Union in late 1980s did not. The question is whether today's China will.

In democratic countries, political institutions hold politicians accountable for improving citizens' welfare. Deng's and post-Deng China have created meritocratic incentives within the Communist Party without democratic reforms. As shown in several empirical studies (Bo 2002; Maskin, Qian, and Xu 2000; Li and Zhou 2005; and Chen, Li, and Zhou 2005), Chinese leaders had been more likely to be promoted if they managed to deliver faster economic growth in their provinces. The system has not rewarded other dimensions of development (including local public goods, Persson and Zhuravskaya 2016). This system worked reasonably well in the 1980s and 1990s, while the socioeconomic development could be proxied by a single scalar indicator of economic growth. At the current stage of development, the central government has to to include other aspects of well-being such as inequality, environment, industrial safety, quality of governance, et cetera. This creates new challenges. It is not yet clear whether the current governance system will be able to address them or to transform itself to take China from middle-income to high-income levels of development. Jia, Kudamatsu, and Seim (2015) show that performance matters for promotion, but political connections matter as well; moreover, connections reinforce the performance–promotion link, especially for the younger regional leaders. Most importantly, Martinez-Bravo et al. (2018) investigate China's recent initiative of introducing local elections. They show that local elections do create local accountability, reduce corruption, and make the local leaders care about local public goods. It is, however, not clear at all whether China is ready to extend elections to higher levels of the government—and whether without further political reforms, Chinese governance institutions will be well suited for meeting the development new challenges.

3.2 *Alternative History*

The political economy research above has been carried out after Gorbachev's and even Yeltsin's reforms. This work therefore allows us to look back at the challenges described in the book with the benefit of hindsight. Knowing what we know today, can we answer the book's main question in a different way? Was there another approach to reforms that could have succeeded?

The arguments above imply that Gorbachev did face challenging initial conditions. There were strong vested interests—both the three industrial lobbies described in the book and the local elites in the non-Russian republics (as well as Yeltsin in the Russian Federation). Gorbachev lacked enforcement capacity and could not crush these lobbies. With collapsing oil prices, he also lacked cash to bail them out. Finally, the Soviet public had high expectations for the speed of reform and increase in living standards; and—unlike Deng—Gorbachev did not want to (or could not) use force to keep the potential protesters at bay.

A number of Gorbachev's decisions have aggravated this initial set of challenges. Basic macroeconomic incompetence undermined productivity growth and fiscal stance. The lack of clear vision and reform plan has increased the uncertainty, and thus raised the transaction costs, of Coasian bargaining with interest groups. The credibility of the Communist Party was understandably low—and Gorbachev did not build his own pro-reform party. Gorbachev also did not introduce direct presidential elections, missing a chance to gain his own legitimacy versus the interest groups.

However, even without these additional problems, the objective challenges by Gorbachev probably implied that the reforms could only proceed with major external financial support that the West was not ready to provide.[24] If there were a "Marshall plan" for the Soviet Union at that point, the government could have been able to bail out the lobbies and/or provide higher living standards in Russia and non-Russian republics.

The lack of funding alone cannot answer the book's question. As Miller argues, correctly, Deng's dual-track approach did not require external funding. However, for the dual-track approach, enforcement capacity is key. Without enforcement capacity, dual-track reform attempts result in a substantial increase in rent seeking, disorganization, and output decline. This is exactly what happened.

If the Soviet Union was not reformable, was post-Gorbachev Russia? There could have been at least three reasons to be more optimistic in this respect. The key difference is that the non-Russian republics elites were no longer a concern.[25] Moreover, for the post-communist Russian leadership there was an additional opportunity to write off a significant portion of Soviet foreign debt (this was indeed done in Poland). Also, Russian leadership could—correctly—announce that household deposits have been raided by the Soviet government. Third, the post-Soviet reformers could blame the decline in living standards on the previous government (the recession already started in 1991, the last year of Gorbachev's rule). This would make the post-Soviet government more legitimate than Gorbachev's. At the end of the day, Gorbachev was the leader of the Communist

[24] Aven and Kokh (2015) discuss this issue with the US Secretary of State James Baker and Russian Foreign Minister at the time Andrei Kozyrev. Kozyrev argues that in 1991, both George H. W. Bush and James Baker were too busy with US elections (that Republicans were losing). Baker recognizes that the United States underestimated the risks of the collapse of the Soviet Union. Also, for domestic reasons it was hard to justify bailing out a former archenemy.

[25] For brevity's sake I do not discuss the reform challenges in non-Russian post-Soviet states. In those, additional opportunities emerged due to a boost in government's legitimacy because of nation building and lower expectations in terms of income growth.

Party that had been in power for more than seventy years and led Soviet economy into bankruptcy.

Even with these three tailwinds, the challenges were enormous. Oil prices were still low and external financial support was limited, so fiscal pressures did not disappear. Without stable revenues, it was hard to develop social safety nets and design a tax system with low tax rates and a broad tax base. Private property rights were already undermined by spontaneous de facto privatization of enterprises by their management during the late 1980s.

Given the opportunities and challenges, it is not surprising that uncertainty was high. The breadth of potential trajectories discussed at that point is best captured in Yergin and Gustafson (1993), who formulated three scenarios for 2010 Russia:

> (i) Russia disintegrates as its frontier regions rebel or drift into the orbit of neighboring countries; (ii) Russia is invigorated by an economic chudo—“miracle”—that turns it into a thriving exemplar of the free market; (iii) Russia becomes a grim military dictatorship, bent on expansion.[26]

The Yeltsin–Gaidar government that took over from Gorbachev immediately understood that the system was bankrupt and introduced the necessary reforms that had been delayed by the Soviet predecessors. The post-Gorbachev reformers, however, also made certain avoidable mistakes. I will start with those listed in their own postmortem analysis (Aven and Kokh 2015). First, they did not manage to build a political coalition that would assure consistent economic policy. In both Gaidar governments (1991–92 and 1993–94) the pro-market reformers did not have control of monetary policy—and had only a partial control over fiscal policy. Instead of writing off debt and adopting a realistic budget, the first Russian governments funded their deficits via hyperinflation. In addition to destroying investment, inflation also wiped out bank deposits. The depositors therefore blamed the loss of their assets on the Russian, rather than Soviet, government.

The second mistake—which was related to their political weakness—was the lack of communication with the public. The reformers did not manage to provide a clear view of reforms, their timeline, and their costs. The third issue was the inability to guarantee the living standards of the most vulnerable parts of the society.[27] Even if there was an intention to provide social benefits, the deterioration of the public goods and the monetary financing of the budget deficits disproportionately hurt the poor.

In addition to the three mistakes admitted by the reformers themselves, there were other decisions—also described in Aven and Kokh (2015)—that have probably undermined the success of the reforms. First, privatization was off limits to foreigners. This drove down the asset prices, decreased fiscal returns to privatization, and eventually promoted the emergence of Russian oligarchs. In the 1990s, this was justified by the argument that foreign ownership was unacceptable to Russian public. It could, however, be the case that competitive privatization auctions open to foreigners would provide sufficient funds to support the living standards of the

[26] In the years that followed the publication of Gustafson and Yergin’s book, there were periods where each of the three scenarios seemed to be more realistic than others. The “market miracle” was especially relevant in the mid-2000s when Russia was growing at 7 percent per year, Russia’s privatized and restructured oil, steel, and coal sectors increased investments, Russian IT companies successfully competed with Western counterparts, and the Russian middle class enjoyed a consumption boom.

[27] The European Bank for Reconstruction and Development (2016) shows that the impact of the reforms on material, physical, and subjective well-being was very high, especially for the most underprivileged households.

most vulnerable households—thus creating public support for reforms. In an ex post assessment of his own past reform advice, Kornai (2001) argues that the approach to privatization based on sales (especially to strategic owners) has clearly outperformed the one based on giveaways or handing over the assets to dispersed owners through voucher schemes (as in Russia or the Czech Republic).

The other issue was the lack of personal integrity of individual reformers. Aven and Kokh (2015, p.81) describe the first meeting of Gaidar's cabinet, where he announced that the cabinet members should not ask for any privileges (including apartments and dachas) until "life of our citizens improves." This was indeed a crucial foundation for the reform government's credibility. Given the level of socioeconomic hardship during the first years of reforms, the public's confidence in the government would only last as long as it was clear that the government members themselves were not benefiting at the expense of ordinary Russians. Unfortunately, not all members of the team followed Gaidar's tenet.

Finally, Yeltsin's government also did not get sufficient financial support from the West. The West welcomed Russia into the IMF and the World Bank and immediately provided access to their resources. But overall volumes of lending and financial aid were very low. In 1992, IMF lending to Russia was about 1 billion dollars (Aven and Kokh 2015, p. 342). In his afterword to Aven and Kokh (2015), Carl Bildt (then Prime Minister of Sweden) considers this lack of support a grave mistake made by the West. He recalls that Yeltsin and Gaidar's request to G7 was to "create a stabilization fund of $ 4–5 billion." But as the United States was busy with elections, Germany was preoccupied with reunification, and Japan was negative because of the Kurile Islands, even this proposal was not approved.

It is hard to judge now if avoiding the mistakes above would be sufficient to implement Gustafson and Yergin's "miracle" scenario. But if future reformers (and their supporters abroad) want to learn from Soviet and Russian experience, then not repeating them should increase their chances of success.

4. *Conclusions and Implications for Russia, China, and Others*

The main conclusion of the book is that Gorbachev could not follow Deng's path. While Gorbachev understood both the need for reforming the Soviet Union and the Chinese successful approach to reforms, he could not have overcome the resistance of the interest groups. He did not have the power to crush them; nor had he the resources and capacity for credible commitment for buying these interests out.

What does this argument teach us in terms of general theory of reforms? One interpretation of this historical episode is that some systems are just too late to reform. If a potential reformer's predecessors are too complacent, the reformer's choices are limited by the lack of financial resources and lack of enforcement capacity.[28]

If there is no cash and capacity to reform, if there are no institutions to guarantee commitment to coalition deals, do reformers stand any chance? There are two potential solutions: internal and external. In the internal politics, the reformers can try to reduce transactions costs of negotiations with interest groups and coalition partners

[28] A well-known Russian joke describes the reaction of Soviet leaders to the sudden stop of the Soviet train going toward communism. Stalin would order shooting the crew, Khrushchev would ask to disassemble the rails behind and put them in front of the train, and Brezhnev would lower the curtains and shake the cars so the passengers would feel that the progress is on track. Gorbachev would order train to be moved from the Russian to the European track without changing the wheels (the Russian track gauge is 85 mm broader than the standard European one).

through institutionalizing the debate, building political parties, coordinating the expectations, and freeing up the public discussion. This may help in making the groups' interests more transparent and better articulated, remove informational asymmetries, and make win–win outcomes easier to achieve. In some cases, transparency may also reduce legitimacy of antireform lobbies whose power comes from questionable sources, thus making it easier to crush their resistance.

The external component is also important. If the reformers lack cash to buy out interests and build coalitions, they may benefit from borrowing abroad. If it is clear that reforms are to result in growth and prosperity, the external loans will both bring about reforms' success and will be repaid as reforms proceed. Certainly, it is not always obvious that the reforms are likely to succeed even if supported by such lending (especially if reformers themselves lack competence, consistency, and resolve). It is also hard to estimate the amounts sufficient to assure the reforms' irreversibility. However, it is wrong to put down the role of such external support.

One obvious example of success was the Marshall Plan in postwar Western Europe. Another, more recent example was Poland's transition from plan to market. Poland managed to negotiate a write-down and restructuring of its debt. It has also been provided an EU accession roadmap—and post-accession access to EU structural funds. This generosity of the West has been a key determinant of Poland's successful transition.

The stunningly different experiences of Poland and Russia raise the question of the current reform battleground: Ukraine. In the late 1980s, Ukraine had the same level of GDP per capita as Poland. Now the gap in income levels is approximately threefold. It is clear that Ukraine needs reforms. On the other hand, Ukraine has no cash. It also has powerful oligarchic interests and weak political institutions. Will Ukraine follow the Polish or the Russian trajectory? So far, it looks like at least some lessons have been learned. First and foremost, the West has been sufficiently generous. Ukraine has managed to write off and restructure its sovereign debt. There has also been substantial support in terms of aid and investment. The European Union has also agreed to provide visa-free regime to Ukraine's citizens and market access to its businesses. Second, the Ukrainian government understood that its legitimacy depends on integrity and anticorruption drive. Many top officials have been fired and/or investigated for corruption. On many occasions Ukrainian government stood up to the oligarchs. Third, and most importantly, even in the presence of very weak enforcement capacity, Ukraine's government has kept its commitment to the vision of a European Ukraine (here it certainly benefited from the nation-building push driven by the continuing geopolitical risks).

The book also matters for the reform outlook in China. Despite the unprecedented success of the last forty years, China is facing serious challenges and—as recognized by its own leaders—is in urgent need of "structural reforms." China has accumulated major imbalances, industrial overcapacity, high leverage of nonfinancial sector, nonperforming loans in state-owned banks, inefficiencies in state-owned enterprises, and potentially a real estate bubble (Glaeser et al. 2017). Expectations of further income growth have increased while some fundamental sources of previous growth have been exhausted (Li et al. 2017).

With all the similarities to Gorbachev's Soviet Union (at least as described by Miller), today's China has a much stronger hand. It does have enforcement capacity and substantial resources that may be sufficient for paying out the antireform interest groups or for alleviating the pain of reforms for the ordinary Chinese. Moreover, Chinese leadership seems to be much more competent than the last Soviet government that made some basic economic mistakes. The book, however, does contain an important warning for China. It shows that even a very powerful country can end up in a situation where it is too late to reform. Brezhnev-style complacency and delaying the reforms can put the future Chinese leaders in Gorbachev's shoes. Chris Miller's book describes the insurmountable challenges reformers would face in this situation. The book should therefore be read by anyone who wants to understand how to avoid repeating the past mistakes—and the students of China should certainly take note.

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