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From Communism to Capitalism: Private versus Public Property and Inequality in China and Russia†

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Since 1980, many economies around the world have experienced two trends: rising aggregate private wealth-income ratio and increasing income inequality (Piketty and Zucman 2014; Piketty 2014). These trends have been particularly spectacular in China and Russia since their transitions from communism to more capitalist orientated economic systems (Piketty, Yang, and Zucman 2017; Novokmet, Piketty, and Zucman 2017). The transition to a mixed economy has taken different economic and political forms in China and Russia—with different privatization strategies for public assets, in particular. These different strategies have had a large impact on inequality and wealth ownership. In China, the transition has involved gradual but nevertheless wide-ranging reforms. The reforms were implemented progressively, from special economic zones in coastal cities toward inland provincial regions, and in sectoral waves. By contrast, Russia opted for a "big-bang" transition after the fall of the Soviet Union in 1990–1991, with a rapid transfer of public assets to the private sector and the hasty introduction of free market economic principles.

In this paper, we compare our recent findings on private and public wealth accumulation in China and Russia, and discuss the impact of the different privatization strategies followed in the two countries on income inequality.

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I. Privatization and Rise of Private Wealth

A. *Private Wealth versus Public Wealth*

The ratio of private wealth to national income has increased in many countries in recent decades. This can be attributed to a number of factors including high saving rates, the privatization of public assets, and a general rise in asset prices due to a complex combination of factors (including changes in policies and institutions such as rent control, financial regulation, bargaining power of unions versus shareholders, etc.). China and Russia can be viewed as extreme cases of this general evolution.

The transitions from planned to market-based economies in China and Russia brought about large rises in the countries' private wealth-income ratios. While these increases are not unexpected—as a large proportion of public wealth was transferred to the private sector—the magnitude of the rise is particularly striking. At the time of the "opening-up" policy reforms in 1978, private wealth in China amounted to just over 110 percent of national income. By 2015, this figure had reached 490 percent. Russia's transition began 12 years later in 1990, but the change since then has been no less spectacular. Over this shorter period of time, Russia's private wealth-income ratio more than tripled from around 120 percent to 380 percent

In Russia, public assets were transferred to the private sector following the "voucher privatization" strategy. Citizens were given a book of vouchers that represented potential shares in former state-owned enterprises and public housing, which could be traded or sold. This voucher privatization strategy led to a rapid and huge reduction in net public wealth, from around 300 percent of national income in 1990 to 70 percent in 2000, rising slightly thereafter to 90 percent by 2015. In contrast, the gradual process of privatization of public wealth in China

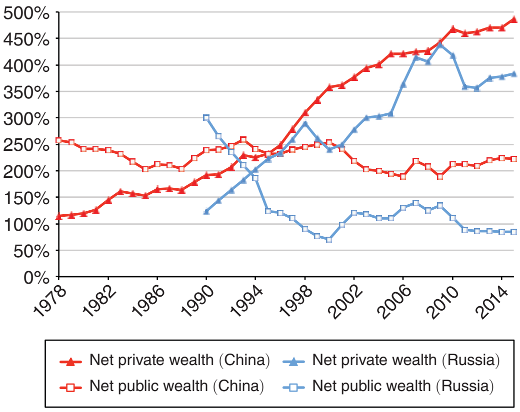

Figure 1. Public versus Private Property in China and Russia 1978–2015 (*Percent national income*)

Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017).

led to a slight overall fall in the value of public wealth as a proportion of national income, from just over 250 percent of national income in 1978 to approximately 230 percent in 2015, in a context of rapidly rising asset prices (see Figure 1).

B. *Composition of Private Wealth*

In both China and Russia, housing played a critical role in the rise of private wealth (Figure 2). In China, following the privatization and liberalization of the housing market, housing prices have increased substantially. As a result, the value of the private housing stock has increased from 60 percent of national income in 1991 to 182 percent of national income in 2015 (Figure 2, panel A). In Russia, the value of private housing increased from less than 50 percent of national income in 1990 to 250 percent of national income in 2008–2009 (at the peak of its housing bubble), before falling to about 170 percent of national income by 2015 (Figure 2, panel B). In addition to real estate price movements, the gradual rise of private housing wealth in Russia between 1990 and 2015 can be accounted for by the relatively slow rate at which citizens took-up their options to cash-in public housing vouchers, compared to the sale of vouchers for shares in previously state-owned enterprises.

The value of households' financial assets differs markedly in China and Russia. According to

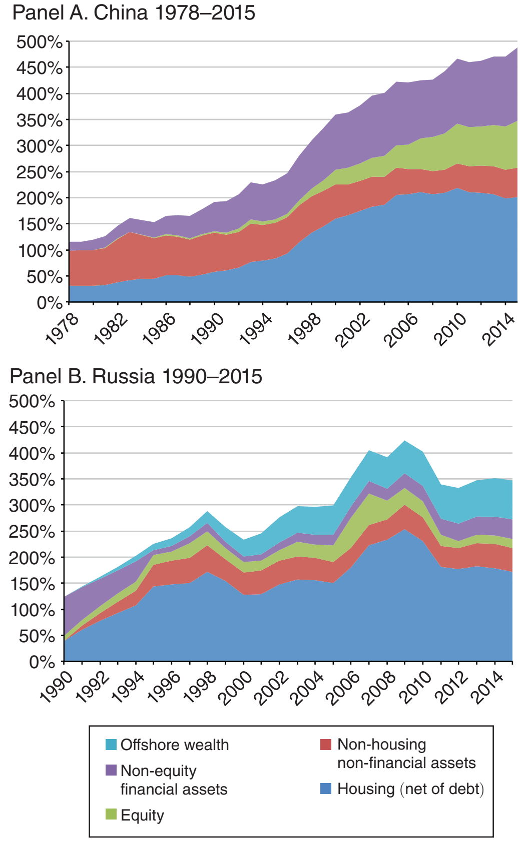

Figure 2. Composition of Private Wealth (*Percent national income*)

Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017).

the officially published balance sheets, Russian households own little financial wealth—always less than 90 percent of national income throughout the 1990–2015 period, and in most years less than 50 percent of national income. In effect, it is as if the privatization of Russian companies had not lead to any significant long-run rise in the value of household financial wealth, despite the fact that the private sector now owns a large proportion of Russian firms' equities.

In comparison, households' financial wealth has increased much more significantly in China since 1978. As a result of the reform of state-owned enterprises (SOEs) and the establishment of a stock exchange, 30 percent of China's corporate equities are now held by the Chinese private sector. The accumulation of other forms of financial assets (bank deposits, bonds, etc.) was also particularly strong, from 17 percent of national income in 1978 to 140 percent in 2015.

One major explanation for the widely divergent patterns of financial asset accumulation in Russia and China is the accumulation of unrecorded offshore assets by a small subset of Russian households. Offshore wealth has gradually increased since 1990, to reach about 85 percent of national income by 2015, i.e., roughly as much as the recorded financial assets of Russian households.[1] It is harder to pin down an accurate number for China's offshore private wealth (which would require a careful treatment of Hong Kong and Macao, in particular), but it is likely to be smaller than Russia's, due to tighter capital controls.

C. *The Decline of Public Property*

Figure 3 compares the evolution of the share of public wealth in national wealth in China, Russia, and other countries. In developed countries, the share of public wealth in national wealth was significantly positive in the post-World War II decades up until about 1980. It was around 15–25 percent, reflecting low public debt and significant public assets. Net public wealth has declined significantly since the 1980s, due both to the rise of public debt and the privatization of public assets. By 2015 net public wealth had turned negative in Britain, Japan, and the United States, and was barely positive in Germany and France.

Ex-communist countries like Russia and China have experienced the same decline in the share of public property, but starting from a much higher level of public wealth. The share of net public wealth was as large as 70–80 percent in both countries in 1980, and fell to 20 percent (Russia) and 30–35 percent (China) in 2015. The Chinese share is higher but not incomparable to that observed in Western high-income countries during the "mixed economy" period (1950–1980). In other words, China and Russia have ceased to be communist in that public ownership is no longer the dominant form of property. However, these countries still have much more significant public wealth than Western high-income economies, due largely to lower public debts and greater public assets.

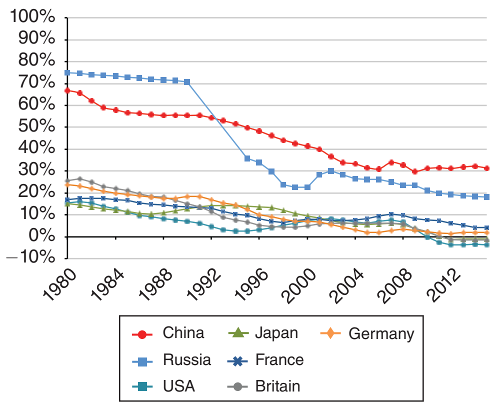

Figure 3. The Decline of Public Property: China versus Russia versus Other Countries
(*Share of public wealth in national wealth*)

Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017); Other countries: Piketty and Zucman (2014).

II. Income Inequality

Income inequality has increased markedly in both China and Russia since the beginning of their respective transitions toward market-orientated economies. Figure 4 displays the income inequality dynamics in China and Russia since 1978 by looking at the evolutions of the top 10 percent and the bottom 50 percent income shares (panel A) and the evolution of the top 1 percent income share (panel B). According to our estimates, inequality was somewhat higher in China than in Russia in 1978, but has now become substantially higher in Russia. In particular, it is striking to note the strikingly fast increase in income inequality in Russia after the fall of the Soviet Union. The top 10 percent income share in Russia rose from less than 25 percent in 1990–1991 to more than 45 percent in 1996, and has remained around 45–50 percent since then. This enormous rise came together with a massive collapse of the bottom 50 percent share, which dropped from about 30 percent of total income in 1990–1991 to less than 10 percent in 1996, before gradually returning to about 18 percent by 2015.

In China, the rise in income inequality has been substantial between 1978 and 2015. The

[1] Novokmet, Piketty, and Zucman (2017) estimate the magnitude of Russia's offshore wealth by exploiting the large discrepancies between trade surpluses (in the first place, from oil and gas exports) and net foreign assets accumulation.

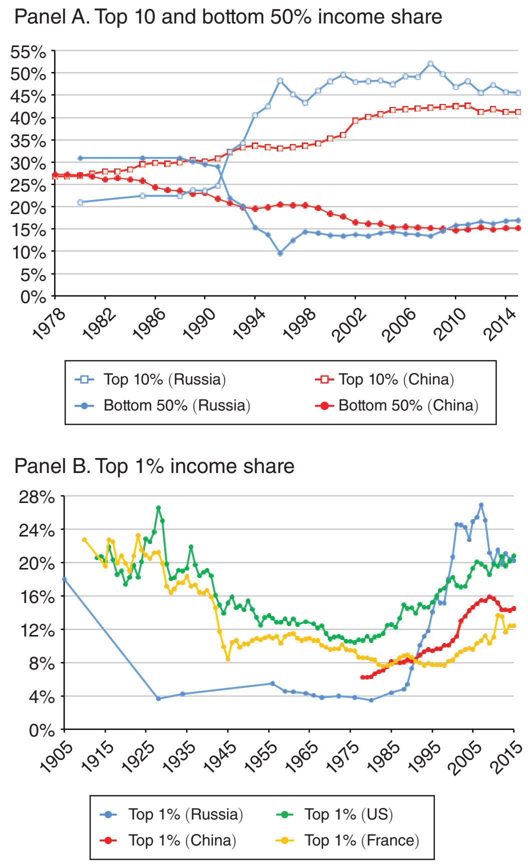

Figure 4. Distribution of Income in China, Russia, United States, and France

Notes: Distribution of pretax national income (before taxes and transfers, except pensions and unemployment insurance) among adults. Corrected estimates combine survey, fiscal, wealth, and national accounts data. Raw estimates in China and Russia rely only on self-reported survey data. Equal-split-adults series (income of married couples divided by two).

Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017); United States and France: WID.world.

top 10 percent income share rose from 27 percent to 41 percent and the bottom 50 percent income share declined from 27 percent to 15 percent. But it has occurred in a much more gradual manner than in Russia.

Although their top 10 percent income shares are relatively similar, China's and Russia's top 1 percent income shares are not. Income concentration at the top is markedly higher in Russia (panel B). Russia has experienced a dramatic increase in top-end inequality since 1990, and despite a fall in the aftermath of the 2008–2009 financial crisis, income inequality is approaching the extreme levels observed in the United States. The top 1 percent income share in China is closer to what one observes in France, a country broadly representative of Western Europe.

The evolution of income inequality in China and Russia partly reflects the different privatization strategies pursued in the two countries. The gradual privatization process in China—where the government is still the majority owner of corporate assets—has limited the rise of income concentration. We also observe a much higher increase in top income shares in Russia than in the other ex-communist Eastern European countries, that have followed more gradual privatization strategies than Russia (Novokmet 2017). This highlights the importance of post-communist transition policies and institutions in shaping income and wealth inequality dynamics. In Russia, the uncoordinated and rapid shock therapy transition process was particularly abrupt. Within the chaotic monetary and political context of the Russian transition, small groups of individuals were able to amass large quantities of vouchers at relatively low prices, and obtained highly profitable deals with public authorities (e.g., via the loans-for-shares agreements). Together with capital flight and the rise of offshore wealth, this process is likely to have led to the extreme levels of income and wealth concentration we now see in Russia. This finding is consistent with Forbes billionaire data, which show a much greater concentration of wealth in the hands of billionaires in Russia than in China and Western countries (Figure 5).

A further insight can be obtained by looking at the distributional impact of growth in Table 1. The economic transformation has produced much higher growth in China than in Russia. Although in both countries growth has not been equally shared, the outstanding growth experienced in China has very substantially lifted the living standards of the poorest. On the contrary, the bulk of the post-communist growth in Russia has been captured by the top. Over the 1989–2016 period, the top 1 percent captured more than two-thirds of the total growth in Russia, while the bottom 50 percent actually saw a decline in its income.

Russian capitalism places few constraints on top incomes (partly coming from outright plundering of the country's natural resources and

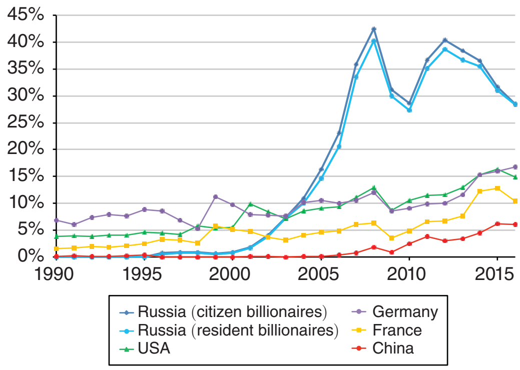

Figure 5. Total Forbes Billionaire Wealth: Russia versus Other Countries, 1990–2016 (*Percent national income*)

Notes: Total billionaire wealth (as recorded by Forbes global list of dollar billionaires) divided by national income (measured at market exchange rates). For other countries, we only report citizen billionaires (numbers for resident billionaires are virtually identical).
Source: Novokmet, Piketty, and Zucman (2017)

Table 1—Average Annual Growth Rates 1978–2015

Income group (distribution of per adult pretax national income)	China (1978–2015)	Russia (1980–2015)	United States (1978–2015)
Full population	6.2	1.1	1.3
Bottom 50	4.5	−0.5	0.0
Middle 40	6.0	0.5	0.9
Top 10	7.4	3.3	2.1
Including top 1	8.4	6.2	3.0
Including top 0.1	9.1	9.9	4.0
Including top 0.01	9.8	13.4	4.7
Including top 0.001	10.4	17.0	5.7

Notes: Distribution of pretax national income among equal-split adults. The unit is the adult individual. Fractiles are defined relative to the total number of adult individuals in the population. Corrected estimates combine survey, fiscal, wealth, and national accounts data.
Sources: China: Piketty, Yang, and Zucman (2017); Russia: Novokmet, Piketty, and Zucman (2017); United States: Piketty, Saez, and Zucman (2016).

foreign reserves), and shows high tolerance for extreme inequality after the failure of Soviet communism and its egalitarian ideology. The enormous political and ideological shift that occurred in Russia could be seen as an extreme version of the ideological reversal in the United States since the 1980s. The development model of China is subject to stronger ideological constraints that may limit the rise in inequality to extreme levels in the future.

III. Conclusion

The dramatic economic transformations in Russia and China have resulted in substantial increases in inequality. However, the rise of inequality was much more pronounced and immediate in Russia, and was more limited and gradual in China. Markedly divergent post-communist inequality patterns suggest that the rise in inequality is not inevitable and point to the importance of policies, institutions, and ideology in shaping inequality.

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