CHINA'S RISE, RUSSIA'S FALL: MEDIUM TERM AND LONG TERM PERSPECTIVE

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ABSTRACT

This essay is an attempt to interpret recent rapid Chinese growth in a longer term perspective. First, it is argued that recent economic liberalization produced spectacular results (1979-onwards) because reform strategy was very different from the Washington consensus package (gradual rather than instant deregulation of prices, no mass privatization, strong industrial policy, undervaluation of the exchange rate via accumulation of reserves). Besides, the recent Chinese success (1979-onwards) is based on the achievements of the Mao period (1949-76) – strong state institutions, efficient government and increased pool of human capital. Unlike in the former Soviet Union, these achievements were not squandered in China due to gradual rather than shock-therapy type democratization.

Second, the success of China in the *medium term*, since 1949, is linked to the factors that contributed to the impressive *long term* performance of China. The roots of both lie in the exceptional continuity of the Chinese civilization – the oldest in the world that managed to preserve its uniqueness and traditions without major interruptions. This millenium perspective success is not limited to the recent (1949 – onwards) impressive catch up in terms of GDP per capita. The other measure of the success is the ability to become the most populous nation on the planet and to retain this status even when the country was falling behind the West in terms of GDP per capita (1500-1950). By the integral criteria (total GDP) China today is the most successful developing country and potentially, within a decade or so – the most successful country of the world.

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Transition period (China – from 1979, Russia – from 1989): gradualism versus shock therapy

The acceleration of economic growth in China after the market-oriented reforms were introduced since 1979 is in sharp contrast to the decline of the Russian economy that occurred in 1989-98, during the transition to a market-based system. The economic performance of the successor states of the former Soviet Union (FSU) has been also disappointing. GDP has fallen by roughly 50 per cent in the FSU from its pre-recession level of 1989 (fig. 1, 2). Investment fell by even more. And income inequality has greatly increased—so that most people have seen a real income decline—and life expectancy has dropped sharply (death rates have risen by about 50 per cent).

In FSU states that were severely affected by conflict (Armenia, Azerbaijan, Georgia, Moldova and Tajikistan), GDP was only 30 to 50 per cent of its pre-transition levels by the late 1990s. Even in the Ukraine (which wasn't affected by military conflict) GDP fell by nearly two-thirds (fig. 2).

This output loss is unprecedented in recent history. During the Second World War the national income of the USSR fell by 20 per cent over 1940-42. But national income recovered its 1940 level by 1944 and—despite falling again by 20 per cent over 1944-46 as military industry was converted—it was 20 per cent above its 1940 level by 1948. GDP in Western countries fell by an average of 30 per cent during the Great Depression (1929-33). But by the end of the 1930s it had recovered its pre-recession levels.

Most other transition economies did better that the FSU states. In Eastern Europe, the fall in output continued for 2-4 years and totaled 20 to 30 per cent. But at least Central Europe is now above its pre-transition output level. In China and Vietnam there was no transformational recession at all—on the contrary, economic growth accelerated from the start of reform. Why has the FSU experienced one of history's worst declines in output and living standards? Is the collapse due to initial conditions and circumstances (i.e. predetermined and hardly avoidable)? Or do poor policy choices play a greater role?

There is a vast literature that seeks to explain different outcomes of market-type reforms in two countries. It was pointed out that initial conditions were different (rural sector accounted for a greater share of the Chinese economy), that China pursued the strategy of gradual reforms (dual track price system and no major privatization), whereas Russia tried to embark on shock therapy, that macroeconomic policies in China were much more prudent than in Russia. However,

differences among scholars persist: the Chinese experience certainly contradicts the conventional wisdom (Washington consensus) that suggests that rapid shock therapy type reforms are supposed to be more conducive to economic growth than step by step gradualism.

FIG.1







This latter conclusion still remains most controversial – the emerging consensus today, if any, seems to be that performance is largely determined by the institutional capacity (the factor that was overlooked in the earlier debates), but economic liberalization still matters a great deal (De Melo et al., 1997; Havrylyshyn and van Rooden, 2003). The theoretical argument in favor of the positive impact of liberalization on performance is quite strong: market economy should be more efficient than the centrally planned economy, so there is a "marketization dividend" to be reaped, and the faster economic liberalization occurs, the better should be the performance. However, there are a number of obvious facts that do not fit into the scheme.

First, China – the only country that carried out classical gradual transition (with slow deregulation of prices – dual track price system) outperformed impressively all other transition economies, and of course Chinese example is too important to ignore (fig. 3). Second, the comparison of Vietnam and China - two countries that shared a lot of similarities in initial conditions and achieved basically the same results (immediate growth of output without transformational recession) despite different reform strategies. While Chinese reforms are a classical example of gradualism, Vietnamese reformers introduced Polish style shock therapy treatment (instant deregulation of most prices and introduction of convertibility of dong) even before Poland did, in 1989, and still managed to avoid the reduction of output². *Third*, differing performance of the former Soviet Union (FSU) states. The champions of liberalization and stabilization in the region were definitely Baltic states (cumulative liberalization index by 1995 -2.4-2.9), whereas Uzbekistan (with the same index of 1.1) is commonly perceived to be one of the worst procrastinators. But in Uzbekistan the reduction of output in 1990-95 totaled only 18% and the economy started to grow again in 1996, while in the Baltics output fell in the early 1990s by 36-60% and even in 1996, two years after the bottom of the recession was reached, was still 31% to 58% below the pre-recession maximum. In 2004-2005, the list of countries that exceeded the pre-recession level of output in 1989 looked very much like a list of procrastinators in terms of economic liberalization and non-democratic regimes in terms of political liberalization: in addition to 5 central European countries and Estonia, there were also Turkmenistan, Uzbekistan, Belarus and Kazakhstan (see fig. 1, 2)³, not to speak about China and Vietnam. Thus, the case for gradual, Chinese-type reforms remains very strong and is very much favored by many academics and policy makers.

 $^{^2}$ While Vietnamese industry, excluding constantly and rapidly growing oil production, experienced some downturn in 1989-90 (-6% in 1989 and 0% in 1990) agricultural growth remained strong, so that GDP growth rates virtually did not fall (5-6% a year).

³ Fig. 1 is based on GDP indices (2004 as a % of 1989) reported in the EBRD Transition Report 2005, whereas fig. 2 reports chain indices (based on annual growth rates) from the same source. The discrepancies are not that substantial.



My own research that compares the performance of 28 post-communist economies (including China and Vietnam) during transition (Popov, 2000, 2007) points out to the following factors of differing performance.

In the first approximation, economic recession that occurred during transition was associated with the need to reallocate resources in order to correct the industrial structure inherited from centrally planned economy (CPE). These distortions include over-militarization and overindustrialization (resulting in the underdevelopment of the service sector), perverted trade flows among former Soviet republics and Comecon countries, excessively large size and poor specialization of industrial enterprises and agricultural farms (lack of small enterprises and farms). In most cases these distortions were more pronounced in former Soviet Union countries (FSU) than in Eastern Europe (EE), not to speak about China and Vietnam, – the larger the distortions, the greater was the reduction of output (fig. 4). Transformational recession, to put in economic terms, was caused by adverse supply shock similar to the one experienced by Western countries after the oil price hikes in 1973 and 1979, and similar to post-war recessions caused by conversion of the defense industries.



Note that the magnitude of the reduction of output during the transformational recession is determined by the size of pre-transition distortions only under shock therapy type instant deregulation of prices. Consider a country where deregulation of prices (or elimination of trade tariffs/subsidies) leads to a change in relative price ratios and thus produces an adverse supply shock for at least some industries. Capital and labor should be reallocated from industries facing declining relative prices and profitability to industries with rising relative prices. If reforms are carried out instantly, then output in the unprofitable sector falls immediately and savings for investment are generated only by the competitive sector, so that it takes a number of years to reach the pre-recession level of output. However, assume that reforms are carried out slowly (gradual price deregulation or elimination of tariffs/subsidies), so that every year output in the non-competitive sector falls not completely, but at a natural rate, i.e. as its fixed capital stock retires in the absence of new investment. In this case it would be possible to avoid the reduction of total output because the decline of the non-competitive sector would be overcompensated by the growth of the competitive sector.

The example illustrates that there is a limit to the speed of reallocating capital from noncompetitive to competitive industries, which is determined basically by the net investment/GDP ratio (gross investment minus retirement of capital stock in the competitive industries, since in non-competitive industries the retiring capital stock should not be replaced anyway). It is not reasonable to wipe away output in non-competitive industries faster than capital is being transferred to more efficient industries. Market type reforms in many post-communist economies created exactly this kind of a bottleneck. Countries that followed shock therapy path found themselves in a supply-side recession that is likely to become a textbook example: an excessive speed of change in relative prices required the magnitude of restructuring that was simply non-achievable with the limited pool of investment. Up to half of their economies was made non-competitive overnight, output in these non-competitive industries was falling for several years and fell in some cases to virtually zero, whereas the growth of output in competitive industries was constrained, among other factors, by the limited investment potential and was not enough to compensate for the output loss in the inefficient sectors (Popov, 2000). The reduction of output in Russian industries was higher in industries that experience the greatest deterioration of their terms of trade (fig. 5).



Hence, at least one general conclusion from the study of the experience of transition economies appears to be relevant for the reform process in all countries: *provided that reforms create a need for restructuring (reallocation of resources), the speed of reforms should be such that the magnitude of required restructuring does not exceed the investment potential of the economy.* In short, the speed of adjustment and restructuring in every economy is limited, if only due to the limited investment potential needed to reallocate capital stock. This is the main rationale for gradual, rather than instant, phasing out of tariff and non-tariff barriers, of subsidies and other forms of government support of particular sectors (it took nearly 10 years for the European Economic Community or for NAFTA to abolish tariffs). This is a powerful argument against shock therapy, especially when reforms involved result in a sizable reallocation of resources. For

Western countries with low trade barriers, low subsidies, low degree of price controls, etc. even fast, radical reforms are not likely to require restructuring that would exceed the limit of investment potential. But for less developed countries with a lot of distortions in their economies supported by explicit and implicit subsidies, fast removal of these subsidies could easily result in such a need for restructuring that is beyond the ability of the economy due to investment and other constraints.

Such a reduction of output due to the inability of the economy to adjust rapidly to new price ratios is by no means inevitable, if deregulation of prices proceeds gradually (or if losses from deteriorating terms of trade for most affected industries are compensated by subsidies). The pace of liberalization had to be no faster than the ability of the economy to move resources from non-competitive (under the new market price ratios) to competitive industries.

The additional reason for the extreme depth and length of the transformational recession was associated with the institutional collapse – here differences between EE countries and FSU are striking. The efficiency of state institutions, understood as the ability of the state to enforce its own rules and regulations, resulted in the inability of the state to perform its traditional functions – to collect taxes and to constraint the shadow economy, to ensure property and contract rights and law and order in general (crime rates and corruption increased dramatically during transition as compared to the communist past). Naturally, poor ability to enforce rules and regulations did not create business climate conducive to growth and resulted in the increased costs for companies. The decline in the share of government revenues in GDP is strongly correlated to the dynamics of output during transition (fig. 6).



It is precisely this strong institutional framework that should be held responsible for both – for the success of gradual reforms in China and shock therapy in Vietnam, where strong authoritarian regimes were preserved and CPE institutions were not dismantled before new market institutions were created; and for the relative success of radical reforms in EE countries, especially in Central European countries, where strong democratic regimes and new market institutions emerged quickly. And it is precisely the collapse of strong state institutions that started in the USSR in the late 1980s and continued in the successor states in the 1990s that explains the extreme length, if not the extreme depth of the FSU transformational recession.

Three major patterns of change in the share of government expenditure in GDP⁴, which generally coincide with the three major archetypes of institutional developments, and even broader - with three most typical distinct "models" of transition, are shown in fig. 7. Under *strong authoritarian regimes* (China) cuts in government expenditure occurred at the expense of defense, subsidies and budgetary financed investment, while expenditure for "ordinary government" as a percentage of GDP remained largely unchanged (Naughton, 1997); under *strong democratic regimes* (Poland) budgetary expenditure, including those for "ordinary government", declined only in the pre-transition period, but increased during transition itself; finally, under *week democratic regimes* (Russia) the reduction of the general level of government expenditure led not only to the decline in the financing of defense, investment and subsidies, but to the downsizing of "ordinary government", which undermined and in many instances even led to the collapse of the institutional capacities of the state.

While in China total budgetary expenditure and that for "ordinary government" are much lower than in Russia and Poland, they were sufficient to preserve the functioning institutions since the financing of social security from the government budget was traditionally low. In Russia, however, though expenditure for ordinary government seem to be not that much lower than in Poland, the pace of their reduction during transition exceeded that of GDP: to put it differently, given the various patterns of GDP dynamics, while in Poland "ordinary government" financing grew by about one third in real terms in 1989-95/6 (and while in China it nearly doubled), in Russia it fell by about 3 times! The Russian pattern of institutional decay proved to be extremely detrimental for investment, and for general economic performance.

⁴ Data for China (World Bank, 1996), Russia (Goskomstat) and Poland (Rocznik Statystyczny 1990, Warszawa; and data from Institut Finansow provided by G. Kolodko) do not include off-budget funds, which are very substantial in all three countries and are used mostly for social security purposes. Defense expenditure are from official statistics, i.e. lower than Western estimates, which is likely to lead to overstatement of spending for investment and subsidies at the expense of defense outlays. For USSR/Russia investment and subsidies are shown together.

What lead to the institutional collapse and could it have been prevented? Using the terminology of political science, it is appropriate to distinguish between strong authoritarian regimes (China and Vietnam and to an extent – Belarus and Uzbekistan), strong democratic regimes (Central European countries) and weak democratic regimes (most FSU and Balkan states) – see fig. 8. The former two are politically liberal or liberalizing, i. e. protect individual rights, including those of property and contracts, and create a framework of law and administration, while the latter regimes, though democratic, are politically not so liberal since they lack strong institutions and the ability to enforce law and order (Zakaria, 1997). This gives rise to the phenomenon of "illiberal democracies" – countries, where competitive elections are introduced before the rule of law is established. While European countries in the XIX century and East Asian countries recently moved from first establishing the rule of law to gradually introducing democratic elections (Hong Kong is the most obvious example of the rule of law without democracy), in Latin America, Africa, and now in CIS countries democratic political systems were introduced in societies without the firm rule of law.



Fig. 8. Indices of the rule of law and political rights (democracy), 0-10 scale, higher value represent stronger rule of law and democracy



Authoritarian regimes (including communist), while gradually building property rights and institutions, were filling the vacuum in the rule of law via authoritarian means. After democratization occurred and illiberal democracies emerged, they found themselves deprived of old authoritarian instruments to ensure law and order, but without the newly developed democratic mechanisms needed to guarantee property rights, contracts and law and order in general. No surprise, this had a devastating impact on investment climate and output.

There is a clear relationship between the ratio of rule of law index on the eve of transition to democratization index, on the one hand, and economic performance during transition, on the other. To put it differently, democratization without strong rule of law, whether one likes it or not, usually leads to the collapse of output. There is a price to pay for early democratization, i.e. introduction of competitive elections of government under the conditions when the major liberal rights (personal freedom and safety, property, contracts, fair trial in court, etc.) are not well established.

Finally, performance was of course affected by economic policy. Given the weak institutional capacity of the state, i.e. its poor ability to enforce its own regulations, economic policies could hardly be "good". Weak state institutions usually imply populist macroeconomic policies (budget deficits resulting in high indebtedness and/or inflation, overvalued exchange rates), which have devastating impact on output. On the other hand, strong institutional capacity does not lead automatically to responsible economic policies. Examples range from the USSR before it collapsed (periodic outburst of open or hidden inflation) to such post Soviet states as Uzbekistan and Belarus, which seem to have stronger institutional potential than other FSU states, but do not demonstrate higher macroeconomic stability.

Regressions tracing the impact of all mentioned factors are reported in table 1. If the rule of law and democracy indices (see data section for definitions) are included into the basic regression equation, they have predicted signs (positive impact of the rule of law and negative impact of democracy) and are statistically significant (equation 1), which is consistent with the results obtained for larger sample of countries⁵. The best explanatory power, however, is exhibited by

⁵ For a larger sample of countries (all developing and developed countries, not only transition economies), the result is that there is a threshold level of the rule of law index: if it is higher than a certain level, democratization affects growth positively, if lower – democratization impedes growth (Polterovich, Popov, 2006). For the regressions reported in table 1 (to explain changes in output in 1989-96) averages of rule of law and democracy indices were used for the longer period (1989-98) to account for the fact that business agents often anticipate changes in business climate that are captured in experts' estimates only later.

the index that is computed as the ratio of the rule of law index to democracy index: 83% of all variations in output can be explained by only three factors – pre-transition distortions, inflation, and rule-of-law-to-democracy index (table 1, equation 2). If liberalization variable is added, it turns out to be statistically insignificant and does not improve the goodness of fit (equation 3). At the same time, the ratio of the rule of law to democracy index and the decline in government revenues are not substitutes, but rather complement each other in characterizing the process of the institutional decay. These two variables are not correlated and improve the goodness of fit, when included together in the same regression: R^2 increases to 91% (equation 5) – better result than in regressions with either one of these variables. The liberalization index, when added to the same equation, only deteriorates the goodness of fit, is not statistically significant, and has the "wrong" sign.

To test the robustness of the results, another year for the end of the transformational recession was chosen – 1998, so the period considered was 1989-98 (by the end of 1998 the absolute trough was reached in 24 countries out of 26 that experienced the recession). The adjusted R^2 is slightly lower, but the statistical significance of coefficients remains high (with the exception of the initial GDP per capita). The best equation is shown below:

Log(*Y*98/89)=5.8-.006DIST-0.005Ycap87-0.39WAR-0.01GOVREVdecline -0.17logINFL -.003DEM (-2.48) (-0.09) (-3.22) (-2.94) (-4.60) (-1.74)

(N= 28, Adjusted $R^2 = 82\%$, T-statistics in brackets, all variables are shown in the same order as in equation 7 from table 1, liberalization variable is omitted).

Once again, if liberalization variable is introduced in this equation, it turns out to be insignificant.

To summarize, Chinese style gradual deregulation of prices allowed to avoid the collapse of output in non-competitive industries, whereas gradual democratization allowed to preserve strong institutions that contributed greatly to the recent Chinese economic success.

Table 1. Regression of change in GDP in 1989-96 on initial conditions, policy factors, and rule of law and democracy indices, robust estimates Dependent variable = log (1996 GDP as a % of 1989 GDP)

Equations, Number of	1,	2,	3,	4,	5,	6,	7,
Observations / Variables	N=28	N=28	N=28	N=28	N=28	N=28	N=28
Constant	5.3***	5.4***	5.2***	5.4***	5.4***	5.5***	5.7***
Distortions, % of GDPa	005**	005**	003	006**	007***	007***	007***
1987 PPP GDP per capita, %	009**	006*	007**	007**	009***	008	008***
of the US level						***	
War dummy ^b				19 ^c	36***	37***	45***
Decline in government					011***	011	011
revenues as a % of GDP						***	***
from 1989-91 to 1993-96							
Liberalization index			.05			02	.03
Log (Inflation, % a year,	16***	20***	18***	17***	13***	13***	14***
1990-95, geometric average)							
Rule of law index, average	.008						
for 1989-97, %	***						
Democracy index, average	005						003**
for 1990-98, %	***						
Ratio of the rule of law to		.07***	.07***	.06***	.05***	.05***	
democracy index							
Adjusted R ² , %	82	83	83	85	91	91	90

For China - all indicators are for the period of 1979-86 or similar

*, **, *** - Significant at 1, 5 and 10% level respectively.

^{*a*}Cumulative measure of distortions as a % of GDP equal to the sum of defense expenditure (minus 3% regarded as the 'normal' level), deviations in industrial structure and trade openness from the 'normal' level, the share of heavily distorted trade (among the FSU republics) and lightly distorted trade (with socialist countries) taken with a 33% weight – see (Popov, 2000) for details.

^bEquals 1 for Armenia, Azerbaijan, Croatia, Georgia, Macedonia, and Tajikistan and 0 for all other countries. ^c Significant at 13% level.

Medium term perspective – since 1949: Beijing consensus versus Washington consensus

The catch-up development of China since 1949 looks extremely impressive: not only the growth rates in China were higher than elsewhere after the reforms (1979-onward), but even before the reforms (1949-79), despite temporary declines during the Great Leap Forward and the Cultural Revolution, the Chinese development was quite successful. According to Maddison (2003), Chinese per capita GDP was about 70% of India's in 1950, rose to about 100% by 1958-59, fell during the Great Leap Forward, rose again to 100% of the Indian level by 1966, fell during the first years of Cultural Revolution, and rose again to 100% by 1978. By 2001 it was more than 80% higher than Indian.

World Bank estimates (WDI, 2005), however, suggest that since 1960 Chinese growth rates (5year moving averages) were always higher than Indian (fig. 9), that in the late 1970s, right before the reforms, Chinese per capita GDP was only half of India's, whereas today it is nearly 2 times higher (fig. 10). Life expectancy in China in 1950 was only 35 years, but by the end of the 1970s rose to 65 years – 13 years higher than in India (fig. 11); today it is 72 years – 7 years higher than in Russia and India.













Thus, by all counts Chinese development was extremely successful not only during the reform period (1979-onwards), but also since Liberation (1949 – onwards) despite the drawbacks of the Great Leap Forward and the Cultural Revolution.

There is a controversy among economists whether 10% annual Chinese growth is sustainable. Parallels have been made between East Asian and Soviet growth. Krugman (1994), referring to the calculations by Young (1994), has argued that there is no puzzle to Asian growth; that it was due mostly to the accelerated accumulation of factor inputs – capital and labor, whereas TFP growth was quite weak (lower than in Western countries). The logical outcome was the prediction that East Asian growth is going to end in the same way the Soviet growth did –over-accumulation of capital resources, if continued, sooner or later would undermine capital productivity. It may have happened already in Japan in the 1970s - 1990s (where growth rates declined despite the high share of investment in GDP) and may be happening in Korea, Taiwan and ASEAN countries after the currency crises of 1997. The only other alternative for high growth countries would be to reduce the rates of capital accumulation (growth of investment), which should lead to the same result – slowdown in the growth of output. Radelet and Sachs (1997), however, challenged this view, arguing that East Asian growth is likely to resume in two to three years after the 1997 currency crises.

A different approach (based on endogenous growth models and treating investment in physical and human capital as causing increases in TFP) is that in theory rapid growth can continue endlessly, if investments in physical and human capital are high. According to this approach, all cases of "high growth failures" – from USSR to Japan - are explained by special circumstances and do not refute the theoretical possibility of maintaining high growth rates "forever". The logical "special" explanation for the Soviet economic decline is of course the nature of the centrally planned economy itself that precluded it from using investment as efficiently as in market economies. In a market economy that operates well below the technological frontier, the rapid catch-up development can be virtually endless, if the right policies are pursued. Continuing for nearly three decades 10% annual growth in China with the share of investment in GDP approaching 50% so far supports this view.

It is important to realize though, that the theoretical possibility of rapid catch up development can materialize in practice only if several necessary conditions are met simultaneously, at the same time. These pre-conditions for the Chinese success of recent 30 years were created mostly in the preceding period of 1949-76. In fact, there would be no exaggeration at all to claim that without the achievements of Mao's regime the market-type reforms of 1979 and beyond would never produce the impressive results that they actually did. Rapid growth is a complicated process that requires a number of crucial inputs - infrastructure, human capital, even land distribution in agrarian countries, strong state institutions, economic stimuli among other things. Once one of these crucial necessary ingredients is missing, the growth just does not take off. Rodrik, Hausmann, Velasco (2005) talk about "binding constraints" that hold back economic growth. In this sense, economic liberalization in 1979 and beyond was only the last straw that broke the camel's back. The other ingredients, most important – strong institutions and human capital, have already been provided by the previous regime. Without these other ingredients liberalization alone in different periods and different countries was never successful and sometimes counterproductive, like in Sub-Sahara Africa in the 1980s and former Soviet republics in the 1990s.

Market-type reforms in China in 1979 and beyond brought about the acceleration of economic growth because China already had an efficient government that was created by CPC after Liberation and that the country did not have in centuries⁶ (Lu, 1999). Through the party cells in every village the communist government in Beijing was able to enforce its rules and regulations all over the country more efficiently then any emperor, not to speak about Guomindang regime (1912-49). While in the XIX century the central government had revenues equivalent to only 3% of GDP (against 12% in Japan right after the Meiji restoration) and under Guomindang

⁶ To a lesser extent it is true about India: market-type reforms in the 1990s produced good results because they were based on previous achievements of import substitution period (Nayyar, 2006).

government they increased only to 5% of GDP, Mao's government left the state coffers to the Deng's reform team with revenues equivalent to 20% of GDP. In the same period, during the "clearly the greatest experiment in the mass education in the history of the world" (UNESCO-sponsored 1984 Report) literacy rates in China increased to from 28% in 1949 to 65% by the end of the 1970s (41% in India).

The Great Leap Forward (1958-62) and the Cultural Revolution (1966-76) are said to be the major failures of the Chinese development. True, output in China declined three times in the whole post Liberation period: in 1960-62 by over 30%, in 1967-68 – by 10%, and in 1976 – by 2% (WDI, 2005). The Great Leap Forward produced a famine and a reduction of the population. But if these major setbacks could have been avoided, the Chinese development in 1949-79 would look even more impressive. Most researchers would probably agree that the Great Leap Forward that inflicted the most significant damage could have been avoided in a sense that it did not follow logically from the intrinsic features of the Chinese socialist model. There is less certainty on whether the Cultural Revolution can be excluded from the "package" of policies followed – this mass movement was very much in line with socialist developmental goals and most probably prevented the inevitable bureaucratization of the government apparatus that occurred in other communist countries⁷. But the point to make here is that even without excluding these periods, the Chinese development laid the foundations of the truly exceptional success of post reform period.

It is also important to recognize, that post 1979 reform Chinese model of economic growth is based on principles that has nothing to do with Washington or even post-Washington consensus. A responsible macroeconomic policies (no high inflation) is about the only principle of the Washington consensus that China has adhered to after 1979, whereas with respect to other fundamental principles (fast deregulation and liberalization of prices and markets, downsizing of the government, privatization, opening up of the economy) Chinese policy was not only different

⁷ In June 15, 1976, when Mao's illness became more severe, he called Hua Guofeng and some others in and said to them: "...I am over 80 now, and when people get old they like to think about post-mortal things ... In my whole life I accomplished 2 things. One is the fight against Jiang Jieshi [Chiang Kai-shek] for several decades, and kicking him out onto a few islands, also the fight an 8 year resistance war against the Japanese invasion which forced the Japanese to return to their home. There has been less disagreement on this thing... Another thing is what you all know, that is, to launch the "Cultural Revolution". Not so many people support it, and quite a number of people against it. These 2 things are not finished, and the legacy will be passed onto next generation. How to pass it on? If not peacefully, then in turbulence, and, if not managed well, there would be foul wind and rain of blood. What you are going to do? Only heaven knows." (People's Web, 2003).

from, but exactly the opposite of neoliberal prescriptions. Since 1979 Chinese economic model is based on:

- Gradual democratization and the preservation of the one party rule in China allowed to avoid institutional collapse, whereas in Russia institutional capacity was adversely affected by the shock-type transition to democracy (Polterovich, Popov, 2006);
- Gradual market reforms "dual track price system" (co-existence of the market economy and centrally planned economy for over a decade), "growing out of socialism" (no privatization until 1996, but creation of the private sector from scratch), non-conventional forms of ownership and control (TVEs);
- Industrial policy strong import substitution policy in 1949-78 and strong export-oriented industrial policy afterwards with such tools as tariff protectionism (in the 1980s import tariffs were as high as up to 40% of the value of import) and export subsidies (Polterovich, Popov, 2005);
- Macroeconomic policy not only in traditional sense (fiscal and monetary policy), but also exchange rate policy: rapid accumulation of foreign exchange reserves in China (despite positive current and capital account) led to the undervaluation of yuan, whereas Russian ruble became overvalued in 1996-98 and more recently – in 2000-07. Undervaluation of the exchange rate via accumulation of reserves became in fact the major tool of export-oriented industrial policy (Polterovich, Popov, 2004).

One of the principles, namely trade openness, is probably most controversial. The advocates of the liberalization would often argue that the increase in the share of exports in GDP in China from 2% in 1970 (5% in 1979) to 35% in 2005 is a proof that openness works. As usually happens, victory has many parents, whereas the defeat is always an orphan. However, as Rodriguez and Rodrik (1999) argued, there are two notions of trade openness that often get confused – the liberal trade regime (no barriers to imports and exports, convertible currency) and the share of trade in GDP – and these two do not always go together. There is plenty of evidence that high and increasing share of trade in GDP is strongly correlated with economic growth and investment/GDP ratios (fig. 12, 13), but there is no evidence that the higher and increasing share of trade policies. Fast growing and more intensively trading nations are not always and were not always more open to trade (had low tariff and non-tariff barriers) than their less globalized competitors: among countries with rapid growth of export/GDP ratios there are quite a few that maintained high import duties (fig. 14).



For the XIX century, although detailed statistics does not exist, there are some powerful examples, suggesting that the growth-promoting nature of free trade is at best not obvious: China after the Opium Wars had to open its economy to international trade completely, but GDP per capita in 1949, when the communists took power, was at the same level as in 1850; 100 years was lost for growth despite pervasive openness (Lu, 1999). On the contrary, initially Chinese rapid growth of the share of trade in GDP (from 2% in 1970 to 25% in 1995) was taking place under an extremely protectionist trade policy – before 1979 there was a complete state monopoly

on foreign trade, and in 1979-95 there was no convertibility of yuan even on current account, whereas average import duties were above 35% (Rodrik, 2006).



Recent empirical studies (Rodriguez and Rodrik, 1999; O'Roerke and Williamson, 2002; O'Roerke and Sinnoit, 2002; see for a survey: Williamson, 2002) found that there is no conclusive evidence that free trade is always good for growth: whereas protectionist countries grew more rapidly before the WWI (fig. 15), they exhibited lower than average growth after the WWII.



Rose (2002) estimated the effect on international trade of multilateral trade agreements, such as the World Trade Organization (WTO), its predecessor the Generalized Agreement on Tariffs and Trade (GATT), and the Generalized System of Preferences (GSP) extended from rich countries to developing countries, using standard "gravity" model of bilateral merchandise trade. He found little evidence that countries joining or belonging to the GATT/WTO have different trade patterns than outsiders, whereas the GSP giving poor countries better access to markets in developed countries, had a very strong effect (an approximate doubling of trade). Polterovich and Popov (2005) gave evidence that in countries with low GDP per capita but relatively good institutions (low corruption), trade protectionism can stimulate growth, whereas for poor and corrupt countries the exchange rate protectionism (undervaluation of domestic currency via accumulation of foreign exchange reserves) has a similar effect.

Besides, recent research (Hausmann, Hwang, and Rodrik, 2006; Rodrik, 2006) suggests that what really matters for promoting growth is not really the expansion of *any* exports, but the ability to increase exports of high tech sophisticated goods. Controlling for the GDP per capita, the index of export sophistication turns out to be very informative for the explanation of cross-country differences in growth rates. It is noteworthy that China had a very high difference between hypothetical level of per capita GDP (calculated on the basis of the sophistication of the structure of export) and actual level. This difference for China was very high in 1992 and remained high in 2002, even though decreased somewhat from its 1992 level.

In short, Chinese external trade regime in the first two decades of economic reforms was nowhere near what might have been called liberal or free trade. And Chinese export performance was so successful not despite of protectionism, but due to protectionism supported with export promotion (subsidies + undervalued exchange rate). The same applies to the other features of the Chinese growth model (gradual democratization and strong institutions; no privatization; exchange rate protectionism).

Because Chinese growth model became so successful in ensuring catch-up development, no surprise it is extremely appealing in developing world. "Beijing consensus" may not yet be a rigorous term (Ramo, 2004), but it is clear that the Chinese growth model provides the developing world with the real alternative. The attractiveness of the Chinese model of economic growth today could be compared with the popularity of the Soviet model of catch up development in the third world in the 1960s. Even though the Soviet model collapsed, the

Chinese model became the logical and natural heir of the Soviet model – it is no longer a centrally planned economy, but it is by no means a model of a liberalized market economy that is recommended by the advocates of Washington and even post-Washington consensus.

Longer term perspective – Asian values versus Western values

Before 1500, all countries had roughly the same GDP per capita (about \$500 in 1985 prices – Maddison, 1995), but by 1900 the gap between the groups of countries that are now called developed and developing increased to 6:1. In 2000 it was roughly at the same level: although in the second half of the 20th century several developing countries (Japan, South Korea, Taiwan, Singapore, Hong Kong) have managed to join the "rich club", while other (Southeast Asia, China and more recently – India) succeeded in bridging the gap considerably with the rich countries, other regions (Sub-Sahara Africa, Eastern Europe and FSU) fell behind or failed to reduce the gap with the West.

The oldest and most crucial question of economic history about the nature and the causes of the wealth of nations – why particular countries are wealthier than the others – still remains largely controversial. There were and are at least two traditions in dealing with this question. One emphasizes the evolutionary nature of the historical progress and the logic of the social development, whereas another focuses primarily on a mere coincidence of events, play of fortune, attributing successes and failures of development to existing geographical conditions or historical accidents.

According to the first, evolutionary, school of thought (Landes, 1998; Mokyr, 2002 - to name just a few contemporary authors), the growth of Western countries in 1500-1900 that allowed them to become the wealthiest in the world was the inevitable result of social changes introduced during this period. Many of interlinked social changes are found to be crucial: abolition of serfdom and guarantees of human rights, Reformation and protestant ethic, *Magna Carta* and European enlightenment are said to cause openness and the flow of ideas and technological innovations that finally led to Industrial Revolution and the acceleration of growth.

On the contrary, another school questions the logic of evolution triggered by the social forces themselves (Dimond, 1997; Pomerantz, 2000 – once again, just to give several contemporary examples) and pays special attention to seemingly minor historical events – fortunate and misfortunate, but mostly accidental – that pre-determined the development of countries and continents for centuries to come. Dimond (1997), for instance argues that the lack of wild

animals suited for domestication in Pre-Columbian America, Africa and Australia and the abundance of these animals in Eurasia gave the latter a huge advantage. Or that perhaps the origins of comparative development can be traced to climatic and environmental conditions at the Eurasian continent that allowed high enough agricultural productivity to support a high density of population - the necessary pre-condition for the spread of technological innovations and rapid economic growth.

Pomerantz (2000) argues that even in the 18th century China was not inferior to Europe in terms of technology, social structures that could support technological innovation, large pools of accumulated capital, etc. According to him, the reason that Europe "succeeded" and China did not was largely determined by a pure chances – the lack of large deposits of coal and iron ore close to each other and the absence of large outward migration (after Zheng He, the greatest world traveler before Columbus, discovered Madagascar, African Horn and Saudi Arabia in early 15th century, the emperors of the Ming dynasty prohibited the construction of big ships and the Middle Kingdom experienced self-imposed isolation for more than three centuries). Pomeranz's argument is that mass emigration from Europe played a crucial role in the transition to the modern growth regime from a Malthusian regime⁸. When technological progress accelerated in the 19th century, but the population growth rates still remained high and growing (0.6% in 1820-70) because the demographic transition has not yet occurred, mass migration to North America helped to alleviate pressure on the scarce resource – land, and to avoid diminishing returns⁹.

New data that appeared in recent years, especially indices of the quality of institutions, triggered new debates not only among economic historians, but among general macro- and growth-economists. In an important paper (Acemoglu, Johson and Robinson, 2001), entitled "Colonial Origins of Comparative Development", the authors used an astute indicator for instrumenting the institutions variable – mortality rate among settlers in the colonies of major European states in the 19th century. The argument was that, if these mortality rates were very high (Gambia, Mali, Nigeria had mortality rates hundreds times higher than Australia, Bahamas, Canada, Hong Kong, New Zealand, US), the settlers did not bother to set good institutions in those countries. It was also claimed that the local population had largely the immunity to the diseases that were mortal

⁸ The latter was characterized by the growth of population that was "eating up" all the potential increases in income per capita resulting from technological change (Galor, Weil, 2000).

⁹ The other, more traditional evolutionary explanation of the economic success of the West (criticized in Pomeranz, 2000) also assigns a non-trivial role to emigration: early elimination of serfdom in Europe made free labor more expensive, which in turn stimulated the development of labor-saving technologies. Without mass emigration to America and other offshoots, labor in the Old World could have remained less expensive.

for the newcomers, so settlers' mortality rate was not affecting directly economic growth, but only via its impact on institutions. That is why this indicator can be used to resolve the endogeneity problem (institutions => growth => institutions) and to properly estimate the impact of institutions on growth. The authors concluded that, after controlling for the impact of institutions, the geographical location does not really have an impact on growth.

Other authors, however, insisted that geography has not only the indirect impact, but also an important direct impact on growth and development. In a series of papers Sachs and Warner (1995, 1997a, b, 1999) and Sachs (1996), argued that resource abundance has an adverse effect on growth via different mechanisms – the overvaluation of real exchange rate (the Dutch disease) and the corrupting impact on the quality of institutions. Sachs and Warner (2001) show that "there is little direct evidence that omitted geographical or climate variables explain the curse, or that there is a bias resulting from some other unobserved growth deterrent. Resource-abundant countries tended to be high-price economies and, perhaps as a consequence, these countries tended to miss-out on export-led growth".

Sachs (2003) and Faye, McArthur, Sachs, and Snow (2004) also attribute a lot of variations in performance to the direct impact of geographical location – through the access to the sea (land-locked countries), transportation costs, climate and diseases. Arguing with Acemoglu, Johnson, and Robinson (2001), Sachs (2003) points out to the fact, that high correlation between the mortality rates of British soldiers around 1820 in various parts of the world and GNP per capita levels of in the 1990 is explained by the direct pernicious effects of malaria in blocking long term economic development. "Acemoglu, Johnson, and Robinson completely neglect the fact that the disease dramatically lowers the returns on foreign investments and raises the transaction costs of international trade, migration, and tourism in malarial regions. This is like claiming that the effects of the recent SARS (Severe Acute Respiratory Syndrome) outbreak in Hong Kong SAR can be measured by the number of deaths so far attributable to the disease rather than by the severe disruption in travel to and from Asia." (Sachs, 2003).

He argues that during recent two decades there have been essentially three groups of developing countries: (1) where institutions, policies, and geography are all reasonably favorable (the coastal regions of east Asia – coastal China and essentially all of Korea, Taiwan Province of China, Hong Kong, SAR, Singapore, Thailand, Malaysia, and Indonesia), (2) that were relatively well endowed geographically but, for historical reasons, have had poor governance and institutions (central European states, whose proximity to Western Europe brought them little

benefit during the socialist regime), and (3) impoverished regions with an unfavorable geography, such as most of sub-Saharan Africa, central Asia, large parts of the Andean region, and the highlands of Central America, that have experienced the severest economic failures in the recent past and that have all been characterized by initial low levels of income and small populations (and hence small internal markets) that live far from coasts and are burdened by disease, especially AIDS, tuberculosis, and malaria. This latter group of countries, Sachs (2003) insists, has "essentially been trapped in poverty because of their inability to meet the market test for attracting private capital inflows".

An opposite view is advocated by Rodrik, Subramanian and Trebbi (2002) in the article with a self explanatory title "Institutions Rule". The authors examine the impact of three basic factors on growth – geography (proxied by the distance to the equator and regional dummies), trade openness (the share of trade in GDP) and institutions. The difficulty, of course, is that all three factors are inter-linked and that institutions and trade openness not only influence growth, but depend on growth themselves. To estimate properly the contribution of each factor, they instrument institutions with the settlers' mortality rate, like Acemoglu, Johnson and Robinson (2001), and instrument the share of trade in GDP with the predicted share of trade (from gravity models). Then, after giving a "fair chance" to geographical variable to compete with the instrumented variables of institutions is most crucial. Institutions are largely, but not totally, determined by geography, and in turn they determine the trade openness and growth. The direct impact of geography on growth (apart from the impact through institutions) turns out to be insignificant.

The difference with the straightforward geographical determinism approach is thus obvious, but there is an important difference with the Acemoglu, Johnson and Robinson (2001) approach as well. Rodrik, Subramanian and Trebbi (2002) believe that geography, in particular settlers' mortality rates, is a good predictor of institutional quality, but not the major cause of it. The genesis of institutions is a complex process with many determinants and finding an appropriate econometric instrument is not the same as finding the proper explanation. Rodrik (2004) explains the difference with the following example: the variation in GDP per capita in countries that were never colonies is no less substantial than among colonized countries – here Ethiopia and Afghanistan are at the one end of the spectrum and Japan at the other end with Turkey and Thailand lying somewhere in between. What accounts for the different quality of the institutions in this non-colonized part of the world?

A different interpretation of the genesis of the institutions in colonized and non-colonized countries is the continuity perspective. All countries had traditional community structures in the past, everywhere before Reformation, under the Malthusian growth regime, the law of the land was what we now call "Asian values" – the superiority of the interests of the community over the interests of the individuals. The West was the first to break away with this principle, making individual rights and freedoms sacred: this resulted in a rapid growth of productivity and allowed to overcome the limits of the two-dimensional Malthusian world (more population => more GDP). The other regions of the world, including the most advanced regions, like China, stayed on a different trajectory of development – preservation of "Asian values" and slow, going hand in hand growth of productivity and population. We can only speculate now, what could have been the outcome of this other trajectory, where the population size was the major driving force of competitiveness. The colonial expansion of the West interrupted the logical development along the second trajectory.

Colonization of Sub-Sahara Africa, North and South America, Australia and to a lesser extent – South Asia led to complete or near complete destruction of traditional (community) structures that were only partially replaced by the new Western-style institutions. Among large geographical regions, only East Asia, MENA and to an extent South Asia managed to retain traditional community institutions despite colonialism. It could be hypothesized that those countries and regions that preserved traditional institutions in difficult times of colonialism and imposition of Western values have now a better chance for the catch up development than the less fortunate regions of the world periphery, where the continuity of the traditional structures was interrupted. Transplantation of institutions is a tricky business that works well only when tailored to the local traditions, so that it does not interrupt the institutional continuity (Polterovich, 2001). Otherwise it leads either to complete elimination of the local structures (US, Canada, Australia) or to non-viable mixture of old and new institutions that is not very conducive to growth.

Formally China was a non-colonized country, although after loosing the Opium wars in the middle of the XIX century it became a semi-colony of the West for nearly a century. The fact is, however, that in the beginning of the XIX century China was definitely the most successful country in the framework of Malthusian growth regime – when increases in productivity due to technological advances were all "eaten up" by the increased growth of the population, so that the technical progress was leading not to higher GDP per capita, but to larger population. The share

of China in total population of the world increased in the XVIII century from a long term average of 22-26% to 37% (fig. 16) – a truly remarkable achievement by the standards of the pre-industrial world.



Fig. 16

To put it differently, China was extremely successful in escaping from Malthusian checks: it's population had previously risen several times to a ceiling of 100-150 million only to fall, whereas by 1800 it rose to nearly 400 million. "This was clearly a world demographic landmark"—notes Sugihara—"and its impact on world GDP far outweighed that of post-industrial revolution Britain, whose share of world GDP in 1820 was less than 6 percent." (Arrighi, forthcoming). The world was probably heading towards a population balance of 1 Chinese per 1 non-Chinese. The comparison with western Europe is very telling: in 0 – 1500 the Chinese population was 2 times larger than that of Western Europe, by 1820 it became 3 times larger (fig. 17).

In the early XIX century, even though the productivity was already 2 times lower than in the West, China still accounted for over a third of population, and about a third of GDP and industrial output. It was clearly recognizing itself as the self sufficient center of the world and was not interested in developing contacts with the "barbarians" from the outer world. "Tremblingly obey and show no negligence" – this is how the Chinese Emperor Qianlun ruling for the major part of the XVIII century (1736-96) ended his famous response to the letter of the British king George III in 1792 with the proposal of trade cooperation.



The problem, however, was that the rules of the game in the world economy have changed: the productivity growth rates in the West increased and Malthusian growth regime came to an end. The military strength was now more determined by technology rather than by the size of the population, so that the outcome of the military confrontation with the West was pre-determined: China experienced a humiliating defeat in the Opium wars (1840-42 and 1856-60) and had to accept globalization on Western terms. Chinese GDP per capita fell from about half of the US level in early XIX century to a meager 5% in 1950 (fig. 18); the ratio of Chinese GDP to that of Western Europe fell from 2:1 to 1:5 in the same period (fig. 19).

However the subsequent Chinese development differed from that of the other colonies and semicolonies. Being the largest and most powerful country of the pre-industrial age, China was better able to preserve the continuity of its traditional institutions. In a sense, Britain is called the country of traditions by mistake. It is China that managed to preserve the continuity of traditional values more than any other nation of the world¹⁰. The Liberation of 1949 has thus lead to a breakthrough: the temporary protection from foreign influence imposed by the CPC (1949-79)

¹⁰ Only two time China was conquered by the outsiders – by Mongols in the XII century (that later established the Yuan dynasty – 1279-1368) and by Manchus (that established the last Qing dinasty – 1644-1911), but in both cases the conquerors were quickly "chinasized" and assimilated by the more powerful Chinese culture. Sinologists agree that the continuity of the Chinese civilization makes it truly unique: all nations started with pictograms (characters), but only larger China (Japan and Korea included) preserved characters throughout all history; the amount of ancient manuscripts and of factual information about the ancient history is at least by the order of magnitude greater than in any other nation of the world; the respect to the ancestors, Confucian values; etc.

allowed to strengthen the traditional institutions, and to continue the development along the lines of the millenium-old trajectory.









Source: Maddison, 1995.

This development today looks quite successful and is not without a precedent: earlier 5 countries based largely on Chinese tradition (Japan, Korea, Taiwan, Singapore and Hong Kong) succeeded in catching up with the West without sacrificing their traditional values. But there is no doubt that the Chinese successful catch up would have a far greater impact on the world. First, because

the previous cases of catch up were generally supported by the West and were sometimes even called "development by invitation", whereas the rise of China did not happen "by invitation" by any stretch of imagination. Second, because the successful catch up of China cannot be interpreted as extraordinary and exceptional due to the sheer size of the country. If successful, Chinese catch up would be really the ultimate and most persuasive evidence of the advantages of institutional continuity.

Conclusions

Why economic liberalization worked in China (1979- onwards), but failed in other countries (Sub-Sahara Africa, Latin America, former Soviet Union)? It is argued that there are at least two explanations. *First*, Chinese reforms were very different from the Washington consensus package (gradual rather than instant deregulation of prices, no mass privatization, strong industrial policy, undervaluation of the exchange rate via accumulation of reserves) – it is explained why these policies contributed to success. *Second*, the recent Chinese success (1979-onwards) is based on the achievements of the Mao period (1949-76) – strong state institutions, efficient government and increased pool of human capital. Unlike in the former Soviet Union, these achievements were not squandered in China due to gradual rather than shock-therapy type democratization.

In a longer term, millenium perspective, the extraordinary success of China before the Opium wars (mid XIX century) and after the Liberation (after 1949) is due to the institutional continuity – the ability to proceed along the evolutionary path without the break up with traditional structures (Asian values). In a sense, Deng's famous "feeling for the stones while crossing the river" strategy of the reforms is deeply rooted in the millenium old Chinese tradition and represents this institutional continuity.

It follows that the successful catch up development of China, if continues, would become the turning point for the world economy not only due to the size of the country, but also because for the first time in history the successful economic development on a major scale is based on indigenous, not Western-type economic model. If this interpretation is correct, the next large regions of successful catch up development would be MENA Islamic countries and South Asia, whereas Latin America, Sub-Sahara Africa and Russia would be falling behind.

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