Russian Regional Inequality in Comparative Perspective

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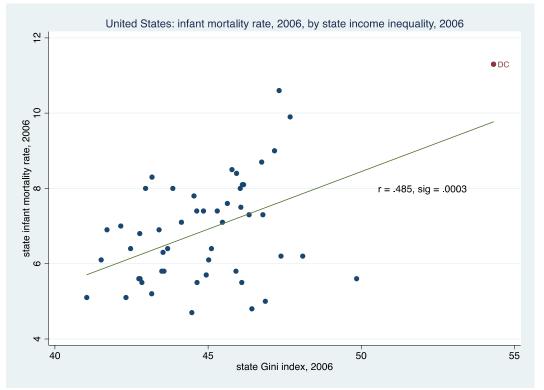
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Abstract: That income inequality has a number of social and political effects has been well documented. In view of the rapid rise in interpersonal and interregional inequality in Russia in the past two decades, this paper seeks to answer three questions. First, descriptively, what are the trends in interregional income inequality in Russia and how do they compare to those in China and other large countries? Second, how are interregional and interpersonal inequality related? Finally, how have social and economic policies shaped interregional inequality? The paper compares Russia with China, although it also draws comparisons to inequality in the United States and other large, heterogeneous countries. In both Russia and China, the growth in interregional inequality has levelled off somewhat in the last few years (at least by some measures) but remains high by international standards. Income inequality is fueled by the widening differentials in earnings, a consequence of the economic reform strategies both countries have followed. Territorial centers of growth, particularly metropolitan centers and natural resource-rich regions, experience faster rates of average income growth than rural and peripheral regions, fueling income inequality across regions. Both Russia and China lack significant fiscal redistributive mechanisms, although government policy has mitigated some of the extremes of social and interregional inequality by shoring up incomes at the low end and through targeted government infra-structure investment intended to raise incomes in poorer regions. However, in both countries, the decentralization, commercialization and privatization of public services has reinforced rather than offset inequality generated in the labor market. Social policy in the area of pensions, unemployment and poverty assistance aims at preventing social unrest rather than being a source of broad-based economic growth. I conclude by arguing that the absence of effective mechanisms for aggregating broad social interests and resolving redistributive conflicts, either corporatist or parliamentary, leaves the state poorly equipped to use social policies to redress interpersonal and interregional inequality except through targeted state spending programs.

The Significance of Inequality

Evidence from many countries demonstrates that inequality is related to a number of social pathologies, such as differential infant mortality rates, homicide, heart disease, and other social pathologies—even after controlling for aggregate and individual-level income.¹ More generally, as Kate Pickett and Richard Wilkinson put it, "the steeper the social gradient a problem has within society [that is, the more it reflects differences in wealth, power and status], the more strongly it will be related to inequality."² In the United States, for example, there is a strong correlation between infant mortality and income inequality at the state level (Figure 1):

Figure 1: United States: Infant Mortality Rates by State Income Inequality, 2006



This relationship holds up even after controlling for state income levels and the black share of the population (Figure 2):

¹ Richard G. Wilkinson, "Income Distribution and Life Expectancy," *British Medical Journal* 304(6820) (1992): 165-168.

² Kate Pickett and Richard Wilkinson, *The Spirit Level: Why Greater Equality Makes Societies Stronger* (New York: Bloomsbury Press, 2011

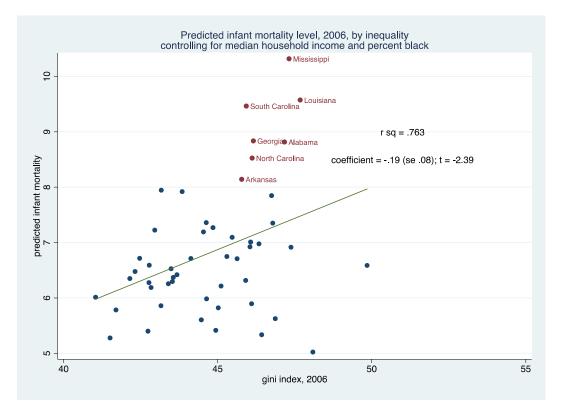


Figure 2: Predicted Infant Mortality Rates by Inequality

The United States data also show a modest association between the level of income inequality in a state and the state's overall level of health. The latter is measured by state-level survey data indicating the average number of healthy days experienced by the citizens of the state. Figure 3 illustrates the bivariate relationship:

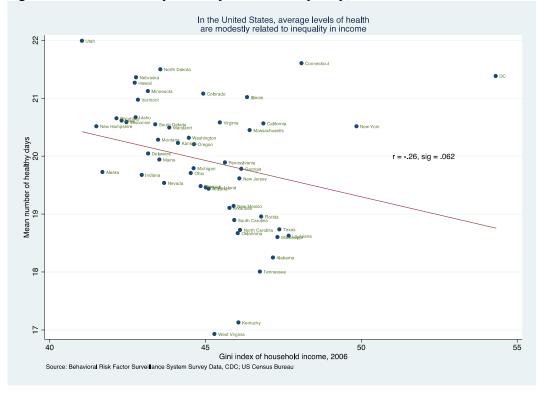


Figure 3: Mean Health by State by Income Inequality, 2007

As the figure shows, the populations of Washington, DC, New York, and Connecticut, which have very high levels of income inequality, have higher mean numbers of healthy days than would be predicted, while citizens in border and southern states have many fewer healthy days than the state levels of income inequality would predict.

However, an extraordinarily close relationship exists between the mean number of healthy days in a state and the inequality among its citizens in the number of healthy days they report experiencing. In other words, as Figure 4 shows, a state with high *inequality* in the levels of health has higher *overall* levels of health. The correlation is nearly perfect (Figure 4):³

³ Benedict I. Truman et al., "Rationale for Regular Reporting on Health Disparities and Inequalities--United States," Prevention, Centers for Disease Control and, CDC Health Disparities and Inequalities Report--United States, 2011. *Morbidity and Mortality Weekly Report*. Atlanta, Centers for Disease Control and Prevention. Supplement/ Vol. 60: (2011).

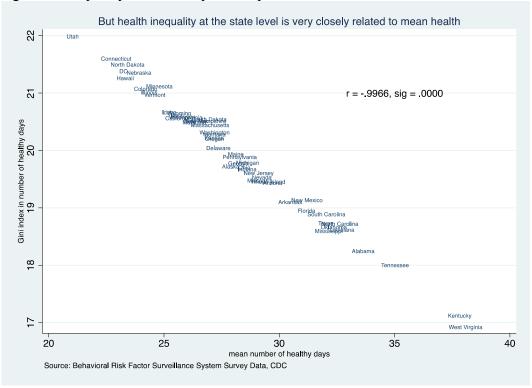


Figure 4: Inequality in Health by State by Mean Health

In other words, the quality of public health appears to reflect externalities from individual-level health. Interaction among individuals in a population with relatively equal levels of health produces a convergence toward a higher *common* level of health for all of them, whereas when a population is segmented among groups with very different levels of health, overall health in the state is lower. This provides some support for the controversial social status explanation for health-related pathologies argued for by Richard Wilkinson.⁴

Whatever the explanation, it seems incontrovertible that some forms of inequality have effects on individuals that are felt at the aggregate level. Robert Dahl has likewise observed that "human beings are naturally endowed with a sensitivity to the unequal distribution of rewards to others whom they view as comparable to themselves in relevant ways."⁵ The key here is "comparability." If profound inequalities in income, status, and wealth in a community undermine the sense of likeness, empathy or fairness, it is likely that the community will undertake less effort to equalize the conditions resulting in inequality. This is a possible explanation for the often-cited finding that societies polarized around income, social class, race, ethnicity, or other deep distinctions among groups are less inclined to tax themselves to supply public goods and services.⁶

⁴ Pickett and Wilkinson, *The Spirit Level*; Richard Wilkinson, *The Impact of Inequality: How to Make Sick Societies Healthier*. (New York: New Press, 2005).

⁵ Robert A. Dahl, On Political Equality (Yale University Press, 2006), p. 39.

⁶ Alberto Alesina, Reza Baqir, and William Easterly, "Public Goods and Ethnic Divisions," *Quarterly Journal of Economics* 114(4) (1999): 1243-1284; William Easterly, "The Middle Class Consensus and Economic Development," *Journal of Economic Growth* 6(4) (2001): 317-33; William Easterly, *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. (Cambridge, MA: MIT Press, 2002); William Easterly and Ross Levine, "Africa's Growth Tragedy: Policies and Ethnic Divisions," *Quarterly Journal of Economics* 112(4) (1997): 1203-1250.

Russia, interestingly, exhibits the opposite pattern to that of the United States or other countries. In Russia, indicators such as infant mortality and life expectancy, particularly for men, are also related to a region's level of income inequality, but the relationship is perverse: the higher the inequality, the lower the infant mortality (and the higher the life expectancy, an even stronger relation!) (Figure 5):

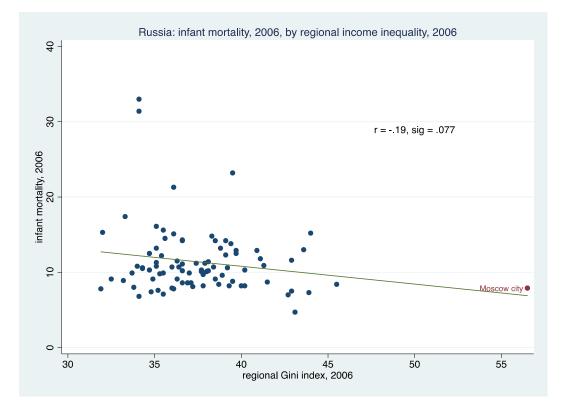


Figure 5: Russia: Infant Mortality by Region by Income Inequality, 2006

However, once the region's mean real income level is held constant, the relationship becomes insignificant. Inequality is, on the other hand, related to regional differences in levels of democracy, even once controls for income and other social and economic factors (such as poverty or natural resource wealth) are controlled for. That is, more unequal regions in Russia have more democratic regimes. I have explored the reasons for this relationship elsewhere.⁷ Briefly, I argue that income inequality is greater where earnings at the upper end of the wage scale are higher, and that this tends to be found in regions where, owing to the greater security of political and property rights, employers are freer to pay (and report!) higher earnings to higher-level employees. Therefore poorer regions have lower inequality, but they also have more predatory and authoritarian regimes, lower social spending, lower investment, and lower growth.

In this paper I treat inequality as the outcome of a set of interacting regime, political and economic factors that, in turn, have implications for the longer-term development of the polity. I seek to address three questions: First, descriptively, what are the trends in interregional income inequality in Russia and

⁷ Thomas F. Remington, *The Politics of Inequality in Russia*. (Cambridge: Cambridge University Press, 2011).

how do they compare to those in China and other large countries? Second, how are interregional and interpersonal inequality related? Finally, how have social and economic policies shaped interregional inequality? The paper compares Russia with China, although it also draws comparisons to inequality in the United States and other large, heterogeneous countries. I find that in both Russia and China, the growth in interregional inequality has abated somewhat in the last few years by some measures, but not by all; and that for both, interregional inequality remains high by international standards. Income inequality is fueled by the widening differentials in earnings, a consequence of the economic reform strategies both countries have followed. Territorial centers of growth, particularly metropolitan centers and natural resource-rich regions, experience faster rates of average income growth than rural and hinterland regions, fueling income inequality across regions. Both countries lack significant fiscal redistributive mechanisms, although government policy has mitigated some of the extremes of social and interregional inequality by shoring up incomes at the low end and through targeted government infrastructure investment intended to raise incomes in poorer regions. However, in both countries, the decentralization, commercialization and privatization of public services has reinforced rather than offset inequality generaed in the labor market; social policy in the area of pensions, unemployment and poverty assistance serves a defensive goal of preventing social unrest rather than being a source of broad-based economic growth.

Strategies of Reform in Russia and China

The conventional view holds that Russia attempted to democratize its polity and liberalize its economy simultaneously, failing at both, whereas China's incremental reforms have minimized distributional tension through rapid growth, while preserving central administrative control. There is obviously much validity to this view. A sharp economic contraction followed the end of the Soviet regime in all the successor states. In Russia, economic output fell by as much as half over the 1990s, thrusting as many as 40% of the population into poverty. State capacity fell. Oligarchs, regional bosses and organized crime subverted government power. Mortality rates, especially among working-age males, shot up to levels unheard of in peacetime.⁸ Economic recovery came only after a financial crash devalued the ruble and even was largely based on natural resource exports while the feeble democratization of the 1990s gave way to a revived authoritarianism in the 2000s.⁹ A 2011 report by the Higher School of Economics in Moscow paints a sobering portrait of the net change in the country's living standards over the first two decades of reform. Once the changes in relative prices were accounted for, the authors found that by 2009, GDP was only 8% higher than it had been in 1990, and aggregate consumption was only

⁸ Between 1990 and 1994, life expectancy at birth in Russia fell by over five years. A widely-discussed article appearing in the British medical journal, *The Lancet*, ascribed a large portion of the increase in mortality rates in Russia and other postcommunist countries to the programs of mass privatization.

Cf Walberg, Peder, Martin McKee, Vladimir Shkolnikov, Laurent Chenet and David A. Leon, "Economic Change, Crime, and Mortality Crisis in Russia: Regional Analysis." *BMJ*:317 (1998): 312-318; Stuckler, David, Lawrence King and Martin McKee, "Mass Privatisation and the Post-Communist Mortality Crisis: A Crossnational Analysis." *The Lancet* 373:9661 (2009): 399-407.

⁹ Goldman, Marshall I., *Petrostate: Putin, Power, and the New Russia*. (New York, Oxford University Press, 2008); McFaul, Michael and Kathryn Stoner-Weiss, "The Myth of the Authoritarian Model: How Putin's Crackdown Holds Russia Back." *Foreign Affairs* 87:1 (2008): 68-84.

45% higher.¹⁰ Some 40% of the population had experienced a net decline in living standards while only 40% saw a net improvement.

For China specialists, it is axiomatic that Russia's record demonstrates the failure of its model of reform. Most would agree with Susan Shirk that: "the Soviet strategy of political reform before economic reform produced political chaos and disintegration and a decline in living standards and growth rates" or Dali Yang's assessment that "Russia's shock therapy did not produce a sound market economy but instead a sort of anarchic capitalism riddled with corruption" or Minxin Pei's judgment that "of course, the big-bang approach has failed miserably in Russia."¹¹

The apparent contrast with China's reforms could scarcely be starker. According to Shirk, "By the end of the 1980s the Chinese strategy of of economic reform without political reform appeared to have worked, at least in overall economic terms."¹² China's combination of liberalization, privatization, and decentralization, while retaining communist party control, is commonly believed to have created incentives for party and state officials to encourage investment and entrepreneurship and attract enormous volumes of foreign investment. Meantime the authorities used the residual coercive capacity of the state to prevent redistributive pressures from blocking growth while constraining government from preving on enterprise. Although there is doubt about the exact figures, Barry Naughton estimates that GDP per capita (in PPP terms expressed in constant US dollars) rose seven-fold between 1978 and 2004, which implies an average annual growth rate of 8.1%.¹³ Incomes rose for all sections of the population. Wang Feng estimates that urban incomes rose, in real terms, 2.4 times between 1985 and 2000, while rural incomes rose 1.8 times.¹⁴ Chinese official figures, which must be treated with considerable skepticism, indicate a quintupling of incomes for both urban and rural households between 1978 and 2004.¹⁵ Qin Gao and Carl Riskin estimate that urban household incomes, adjusted for inflation, doubled over the period from 1988 to 2002, and that rural household incomes rose 70% over the same period.¹⁶ The number of people living in poverty fell from something like 400 million in 1978 to 100 million today.¹⁷

¹⁰ Andrushchak, G. et al., *Mode of Life and Living Standards of Russian Population in 1989-2009*. Moscow, Higher School of Economics and Ekspert Magazine. XII International Academic Conference on Economic and Social Development, 5-7 April 2011; Ol'ga Kuvshininova. "Dve Rossii," *Vedomosti*, April 11, 2011.

¹¹ Shirk, Susan, *The Political Logic of Economic Reform in China*. (Berkeley, CA, University of California Press, 1993), p. 5; Yang, Dali L., *Remaking the Chinese Leviathan: Market Transition and the Politics of Governance in China*. (Stanford, CA, Stanford University Press, 2004), p. 297; Yang, Dali L., *Remaking the Chinese Leviathan: Market Transition and the Politics of Governance in China*. (Stanford, CA, Stanford University Press, 2004), p. 297; Yang, Dali L., *Remaking the Chinese Leviathan: Market Transition and the Politics of Governance in China*. (Stanford, CA, Stanford University Press, 2004), p. 207. It is noteworthy that while Dali Yang and Minxin Pei, two eminent specialists on contemporary Chinese politics, differ fundamentally in their evaluations of state capacity in China, they are completely agreed about Russia. As is often the case, evidence examined closely is much more ambiguous than the seeming obviousness of patterns observed from afar.

¹² Ibid., p. 4.

¹³ Naughton, Barry, *The Chinese Economy: Transitions and Growth*. (Cambridge, MA, The MIT Press, 2007), p. 214.

¹⁴ Wang, Feng, *Boundaries and Categories: Rising Inequality in Post-Socialist Urban China*. (Stanford, CA, Stanford University Press, 2008), p. 96.

¹⁵ Ibid., p. 210.

¹⁶ Gao, Qin and Carl Riskin, "Market versus Social Benefits: Explaining China's Changing Income Inequality." in *Creating Wealth and Poverty in Postsocialist China*. Deborah S. Davis and Feng Wang, Eds. (Stanford, CA, Stanford University Press 2009), pp. 24, 29.

¹⁷ Ibid., p. 214.

One major line of explanation for the differing outcomes between Russia and China contrasts the way administrative decentralization has been carried out in the two countries. For Barry Weingast and his co-authors, China represents a model of "market-preserving federalism."¹⁸ This interpretation holds that the enormous decentralization of control over economic regulation and social welfare administration that China carried out in the 1980s and 1990s, together with liberalization and the establishment of property rights, enabled the country to institute a self-reinforcing competition among provincial and lower governments that restrains state predation on business and encourages productive investment.¹⁹ In contrast, Russia's experience with liberalization and decentralization is associated with the abandonment of both social welfare responsibilities and political control over economic reform, with disastrous consequences.²⁰ In Steven Solnick's terms, the loss of central control in Russia resembled a bank run, in that stake-holders with control over party and state institutions rushed to cash in their assets through privatization and a breakup of the union before nothing was left, whereas China retained a sufficient degree of central control so as to restrain such behavior.²¹

In the absence of clear and objective performance indicators, close observers can read the same evidence in fundamentally different ways.²² For Andrei Shleifer and Daniel Treisman, for example, "although Russia's transition has been painful in many ways and its economic and political systems

²⁰ Stoner-Weiss, Kathryn, "Central Weakness and Provincial Autonomy: Observations on the Devolution Process in Russia." *Post-Soviet Affairs* 15:1 (1999): 87-106; Stoner-Weiss, Kathryn, *Resisting the State: Reform and Retrenchment in Post-Soviet Russia*. (Cambridge, Cambridge University Press, 2006); Zubarevich, Natalia, "Social Welfare Reforms in Russia: Regionalization without Federalism," conference paper at conference on "Challenges, Dynamics and Implications of Welfare Regime Change in a Comparative Perspective: A Dialogue between Post-Soviet and East Asian Scholars," University of Toronto, Toronto, Canada: (2009); Clarke, Simon, *The Development of Capitalism in Russia*. (London, Routledge, 2007); Braithwaite, Jeanine, "The Old and New Poor in Russia: Trends in Poverty." *ESP Discussion Paper Series, Education and Social Policy Department, Human Resources Development and Operations Policy, The World Bank* (1995); Galbraith, James K., Ludmila Krytynskaia and Qifei Wang, "The Experience of Rising Inequality in Russia and China during the Transition." *European Journal of Comparative Economics* 1:1 (2004): 87-106; Grootaert, Christiaan and Jeanine Braithwaite, "The Determinants of Poverty in Eastern Europe and the Former Soviet Union. Poverty and Social Assistance in Transition Countries. Christiaan Grootaert Jeanine Braithwaite, Branko Milanovic, Ed. (London, Macmillan Press 2000), 17-98; Kitty Stewart, *Fiscal Federalism in Russia: Intergovernmental Transfers and the Financing of Education.* (Northampton, MA: Edward Elgar, 2000.

¹⁸ Montinola, Gabriella, Yingyi Qian and Barry R. Weingast, "Federalism, Chinese Style: The Political Basis for Economic Success in China." *World Politics* 48:1 (1995): 50-81; Weingast, Barry, "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics and Organization* 11:1 (1995): 1-31.

¹⁹ Montinola, Gabriella, Yingyi Qian and Barry R. Weingast, "Federalism, Chinese Style: The Political Basis for Economic Success in China." *World Politics* 48:1 (1995): 50-81; Weingast, Barry, "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics and Organization* 11:1 (1995): 1-31.

²¹ Solnick, Steven L., "The Breakdown of Hierarchies in the Soviet Union and China: A Neoinstitutional Perspective." *World Politics* 48 (1996): 209-238.

²² A case in point is the controversy surrounding the World Bank Institute's "governance indicators." Kaufmann, Daniel and Aart Kraay, "Governance Indicators: Where Are We, Where Should We Be Going?" *World Bank Research Observer* 23:1 (2008): 1-30; Kurtz, Marcus J. and Andrew Schrank, "Growth and Governance: Models, Measures, and Mechanisms." *Journal of Poliics* 69:2 (2007): 538-554. The indicators offer point estimates with extremely wide confidence intervals; have suspiciously high intercorrelations; and are subject, to an unknown degree, to endogeneity to the processes of economic development that they are supposed to explain.

remain far from perfect, the country has made remarkable economic and social progress. Russia's remaining defects are typical of countries at its level of economic development."²³ China's record is equally ambiguous. Many observers take the view that China has retained its capacity to guide economic reform and manage its far-reaching consequences. Dali Yang, for example, argues that whatever the strains of the 1980s and early 1990s, since then "China has made substantial progress in improving the institutional framework for economic governance."²⁴ On the basis of a close study of CCP cadre appointment policy, Pierre Landry concludes that "the carefully controlled process of economic and administrative decentralization actually has strengthened the regime."²⁵

Notwithstanding the conventional wisdom, the two countries' paths of reform share some important similarities. It is the case that in Russia, the pension system has remained centrally controlled and covers the entire population whereas in China it is highly decentralized, and until very recently, covered only the urban population.²⁶ Nonetheless, both countries have substantially *decentralized* and commercialized their social welfare systems. Intent on putting as much of the social benefits system on a market footing as possible, through private pension savings, fee-for-service systems of education and healthcare, and the privatization of housing, both governments have also attempted to maintain and expand some state-provided cash benefits, particularly pensions. But the aging of the population, the tacit and overt refusal by employers and employees to pay their required social insurance contributions, and the cronyistic, collusive relations between local governments and major firms in their jurisdictions have undermined the government's reform plans. In both countries, fearful of permitting mass layoffs from local state-owned and collective enterprises, local governments have allowed firms to avoid paying some or all of their mandatory social insurance contributions and have resorted to other, informal means of raising revenues. In China, in particular, local governments have relied heavily on "off-budget funds" that are outside regular budget scrutiny. Moreover, as Christine Wong's research shows, as local governments in China put more social services on a private, market-based footing, increases in collected fees go to raise officials' salaries rather than to improve or subsidize services.²⁷ The combination of decentralization of economic and social policy with the commercialization and privatization of many formerly public services (among them employment security, education, health care, and housing) have led to sharply increasing interpersonal, therefore interregional, income inequality.

Rising inequality, in turn, feeds back into the political process itself by raising the difficulty for policy-makers of imposing fiscal arrangements that would meet resistance from the winners of reform. In short, for both countries, the effects of liberalization, privatization, and decentralization raise the possibility that, for both countries, the result of reform in the social welfare sphere is not "market-preserving federalism" but a form of post-socialist liberalism that treats social policy as a defense against social instability rather than a source of broad-based growth. In particular, a significant result of the combination of decentralization with the privatization of economic activity and social services has been a substantial and, from the standpoint of the leaders, dangerous, rise in interpersonal and interregional

²³ Andrei Shleifer and Daniel Treisman, "A Normal Country," in Andrei Shleifer, *A Normal Country: Russia after Communism* (Cambridge, MA: Harvard University Press, 2005), p. 157.

²⁴ Yang, Dali L., *Remaking the Chinese Leviathan: Market Transition and the Politics of Governance in China*. (Stanford, CA, Stanford University Press, 2004), p. 1.

²⁵ Pierre F. Landry, *Decentralized Authoritarianism in China: The Communist Party's Control of Local Elites in the Post-Mao Era.* (Cambridge, Cambridge University Press, 2008), p. 27.

²⁶ Nara Dillon, "Expanding the Reach of China's Narrow Welfare State: The Post-Mao Reforms in Historical and Comparative Perspective," paper presented at American Political Science Association annual meeting, September 1-4, 2011.

²⁷ Christine Wong, "Rebuilding Government for the 21st Century: Can China Incrementally Reform the Public Sector?," *China Quarterly* 200 (2009): 929-952.

inequality. In China, virtually all strata of the population have seen a net increase in income as a result of the market reforms, whereas in Russia, a sizable proportion of the population remains net losers. Yet in both countries, the growng gap between those who are the greatest net winners and the middle and lower strata has prompted policy-makers to respond by expanding income and benefits for the poorest strata and by investing in state projects intended to raise incomes in distressed regions, but not by creating alternative institutional arrangements for pooling the benefits and risks of economic growth broadly between business and labor, or rich and poor.

Measuring Inequality

Although growth benefited nearly all strata in China and the top two quintiles in Russia, both Russia and China saw a considerable increase in aggregate income inequality in the last two decades. This was associated with the much greater growth of incomes in the higher income brackets than in the middle and lower brackets. As in the United States and other English-speaking democracies, incomes have risen fastest in the very highest income brackets--the top percentile.²⁸ Atkinson and Piketty estimate that the share of total pre-tax income received by the top 1% of income earners in China more than doubled between 1986 and 2003, from 2.65% to 5.87% of all income. The top decile's share of total income rose from about 17% to about 28% over the same period, a smaller percentage increase. (By comparison, the top percentile in the US saw an increase in the same period from 9.13% of income to 14.87%, and the top decile from 34.57% to 42.04%.²⁹) Russia does not report income figures for the top percentile, but it reports income figures by quintile distribution, decile ratios, and Gini indexes. However, it is evident that the same trend toward the concentration of income gains in the very highest income brackets from various press reports. For instance, a report by Rosgosstrakh, the state insurance company, found that from 2006 to 2007, the number of households with incomes in excess of \$1 million (US) had doubled, from 100,000 to 200,000. The number of households with incomes between \$125,000 and 250,000 US per year had risen 64%, faster than the increase in the number of households receiving between 16,000 and 25,000 per year had only risen 13%.³⁰ This was at a time when the median individual income was only about \$3600 per year.

Russia has reported Gini indexes and decile ratios (ie the ratio of the top decile to the bottom) since 1992. (NB: I have converted Gini indexes so that all are expressed as numbers between 1 and 100, where 100 represents maximum theoretical inequality and 1 represents minimum inequality.) Over that period, as Figure xx indicates, aggregate inequality as measured by the decile coefficient has approximately doubled. Measured by the Gini index, it has risen about 46%. Since the Gini index is more sensitive to deviations from inequality in the middle of the income spectrum, and the decile ratio a better measure of movement of incomes at the top of the distribution, we can infer that Russian inequality is better measured by the decile ratio than the Gini index (Figure 6).³¹

²⁸ Atkinson, Anthony B., Thomas Piketty and Emmanuel Saez, "Top Incomes in the Long Run of History." *Journal of Economic Literature* 49:1 (2011): 3-71; .

²⁹ Atkinson, Anthony B. and Thomas Piketty, *Top Incomes: A Global Perspective*. (New York, Oxford University Press, 2010).

³⁰ Shishkin, Maksim, "Srednii klass prirastaet sverkhu," Kommersant. February 27, 2008.

³¹ By comparison, in 2009, the US Gini index was reported by the Commerce Bureau to be 46.8 and the decile ratio to be 11.36.

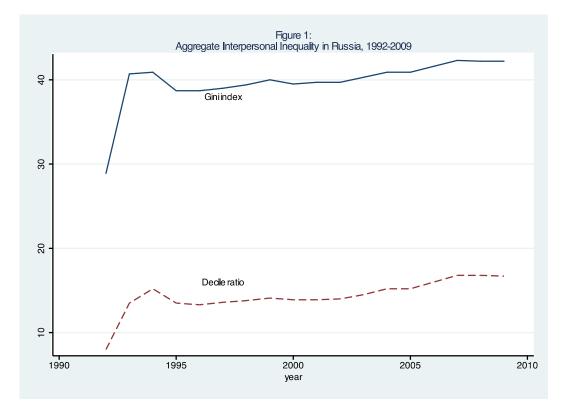


Figure 6: Aggregate Interpersonal Inequality in Russia, 1992-2009

China's reported estimates of aggregate inequality are far less reliable. Gini index estimates vary widely. Barry Naughton estimtes that China's Gini index reached 44.7 by 2001.³² Yasheng Huang cites a Chinese Academy of Social Sciences estimate for 2006 of 49.6.³³ Qin Gao and Carl Riskin, using a household income survey that imputes the value of social benefits, including the rental value of owner-occupied housing, estimate separate Gini coefficients for urban and rural households as well as the households of migrant workers living in cities. For 2002, they estimate a Gini for urban households of 35, for rural households of 37, and for migrant workers of 38.³⁴ Martin King Whyte, in his recent book, *Myth of the Social Volcano*, cites an estimate of the Gini index for 2002 of 45 "or even higher" (from a figure of 29 in 1981).³⁵ The World Bank's World Development Indicators reports an estimate of 42 for 2005. The UN Human Development Report estimates the Gini index stood at 46.9 for 2007-2008.³⁶ Wang Feng estimates that over the period from 1986 to 2000, income inequality for urban employees doubled if measured by the Gini index, and quadrupled if measured by the Theil index (which is more sensitive to

³² Naughton, Barry, *The Chinese Economy: Transitions and Growth*. (Cambridge, MA, The MIT Press, 2007), p. 218.

³³ Huang, Yasheng, *Capitalism with Chinese Characteristics: Entrepreneurship and the State*. (Cambridge, Cambridge University Press, 2008), p. 256.

³⁴ Gao, Qin and Carl Riskin, "Market versus Social Benefits: Explaining China's Changing Income Inequality." in *Creating Wealth and Poverty in Postsocialist China*. Deborah S. Davis and Feng Wang, Eds. (Stanford, CA, Stanford University Press 2009), p. 34.

 ³⁵ Whyte, Martin King, *Myth of the Social Volcano: Perceptions of Inequality and Redistributive Injustice in Contemporary China*. (Stanford, CA, Stanford University Press, 2010), p. 2.
³⁶ Whyte, *Myth*, note 2, p. 203.

changes at the extremes of the distribution).³⁷ The Chinese Academy of Social Sciences reported in 2006 that "'The Gini coefficient, an indicator of income disparities, reached 0.53 last year, far higher than a dangerous level of 0.4."³⁸

For China, we can use the Gao-Riskin CHIP data as well as fragmentary figures reported by China's provincial statistical yearbooks to get some idea of the way income growth has affected income distribution. Table 1A reports the Gao-Riskin estimates of Gini coefficients for urban and rural households at the three time points, 1988, 1995 and 2002, showing a substantial increase in inequality in the first period, followed by a decline in inequality for rural households and a slight increase for urban households.

Table 1A: CHIP household survey income inequality estimates

China: Gini index,	1988	1995	2002
aggregate income (CHIP estimates)			
Urban households	23	34	35
Rural households	36	42	37

Source: Gao, Qin and Carl Riskin, "Market versus Social Benefits: Explaining China's Changing Income Inequality." in *Creating Wealth and Poverty in Postsocialist China*. Deborah S. Davis and Feng Wang, Eds. (Stanford, CA, Stanford University Press 2009), Tables 2.2, 2.4, pp. 24, 31.

Table 1B is based on my calculations from figures provided by China's provincial statistical yearbooks. These usually report either decile or quintile distribution figures for income for various years (sometimes, in fact, they combine quintile and decile figures without explanation) for *urban* households. A few provinces report incomes by quintile for rural households. The median province's decile income ratio for urban households in 2008 was 8.3. However, in most provinces, the *bottom* decile of income earners among urban households received slightly more than the *average* rural household in the same province. This suggests that an accurate decile ratio between the top decile of urban households and the bottom decile of rural households would be much larger. For those few provinces where we can calculate the ratio between the top decile of urban households, the ratios are, if anything, higher than the *decile* ratios reported for regions in Russia: 12.3 in Zhejiang province; 13.25 in Guangdong; 18.95 in Jiangsu. These are of course among the richest provinces, suggesting that, as in Russia, the wealthiest regions also have the highest income inequality. An official report in 2010 claimed that the overall decile ratio of income had risen from 7.3 in 1988 to 23 in 2007.³⁹ If true, that is a level higher by about 50% than Russia's and about twice that of the United States. It is

³⁷ Wang, Boundaries and Categories, p. 73.

³⁸ Josephine Ma, "Wealth gap fuelling instability, studies warn, " *South China Morning Post*. Hong Kong: Dec 22, 2005. pg. 6, cited in Martin King Whyte, "Fair versus Unfair: How Do Chinese Citizens View Current Inequalities? *Growing Pains: Tensions and Opportunity in China's Transformation*. Jean C. Oi, Scott Rozelle and Xueguang Zhou, Eds. (Stanford, CA, Walter H. Shorenstein Asia-Pacific Research Center, Stanford University 2010), p. 305.

³⁹ Li, Cheng, "Introduction: The Rise of the Middle Class in the Middle Kingdom." in *China's Emerging Middle Class*. Cheng Li, Ed. (Washington, DC, Brookings Institution Press 2010), p. 17.

reasonable to suppose, therefore that overall *interpersonal* income inequality in China is at least as great as that of Russia.

Table 1B: Income and wage decile ratios, median region

China: median region	2001	2008
Decile ratio, disposable income, urban households, median	5.74	8.33
province		
Decile ratio, urban wage income, median province		6.65

Source: Calculated from provincial statistical yearbooks

We can also examine *interregional* inequality for Russia and China using official figures. There are various ways of doing so. One is simply to calculate the ratio of the income or output of the richest to the poorest region. The World Bank economist Branko Milanovic observes that the gap in the GDP per capita between China's richest and poorest provinces (he includes Hong Kong in his calculation) is at least 10 to 1; this is higher than the inter-regional gap in Yugoslavia at the point of its breakup (8 to 1) or the Soviet Union on the eve of its breakup (6 to 1). Milanovic concludes that "If there is ever a danger to Chinese national unity, it is very likely to come from the economic split within the nation."⁴⁰ Although he does not mention it, contemporary Russia's interregional inequality, by the same measure, is still greater: in 2009, the GDP per capita of the richest region in Russia (Tiumen' oblast', a center of oil production) was more than 24 times higher than that of the poorest (Ingushetia, an impoverished ethnic republic neighboring Chechnia). This represents a substantial increase over 1995 (when the gap was 17.8), and is one reason Russian policy-makers worry about the possibility that Russia could break up as the Soviet Union did.⁴¹

More usual are other measures: the coefficient of variation (CV), a dimensionless statistic that divides the standard deviation of a distribution by its mean, allowing ready comparison of subnational differences in income among countries varying widely in overall income level. Wang Shaoguang and Hu Angang use the CV to measure relative disparities across China's provinces, and the standard deviation to measure absolute disparities.⁴² Writing in 1999, they note that although China entered the communist era with a pronounced skew in its regional levels of development, Maoist policy equalized interregional differences to some extent. Still, even after three decades of Maoist policies, Shanghai's per capita GDP was 14 times higher than that of the poorest province, Guizhou.⁴³ Using the CV for GDP per capita, they compare China with other countries, including India and Indonesia, and find that China's cross-regional

⁴⁰ Milanovic, Branko, *The Haves and the Have-Nots: A Brief and Idiosyncratic History of Global Inequality*. (New York, Basic Books, 2010), p. 99.

⁴¹ A characteristic expression of this fear occurred recently in comments by Gennadii Burbulis (a close advisor to Boris Yeltsin in 1990-91, and later a member of the Federation Council representing Novgorod). Asked to comment on his view of the prospects facing Russia twenty years after the August 1991 coup attempt, he stated that "my main anxiety 20 years on is the threat of the Russian Federation falling apart. The threat is huge if this regime cannot transform itself. The threat, ultimately, is the disintegration of Russia." Quoted in *Moscow Times*, "Ex-Yeltsin Aide Says Russia Risks Flop," August 21, 2011.

⁴² Wang and Hu, Political Economy of Uneven Development.

⁴³ Ibid., p. 47.

inequality was by far the highest of all the countries they considered.⁴⁴ Oddly, they do not include Russia in their comparison. As we shall see, China is by no means the world leader in interregional inequality once Russia is considered.

Two other measures are the Gini index (ie a measure of the degree to which the pairwise comparisons of regions' mean incomes are equal or not) and the inter-quartile range (IQR), which measures the range of values falling between the top and bottom quartiles of all observations. As we see in the following tables, which measure is used matters because different measures tell different stories as to whether interregional inequality in China is growing or not.

The tables compare interregional inequality using these four different measures for both gross regional output and mean regional income. The same measures--for income only--for the United States, Brazil and India are reported as well for the sake of comparison.

	max:min ratio	CV	IQR	Gini
1990	5.15	.44	3066.6	22
1995	17.8	.54	4518.4	26
2000	19.5	.77	17199.5	31.4
2005	43.3	.86	56105.6	34.3
2009	25.4	.82	84667.1	33

Table 2A: Russia: Gross Regional Product per capita (nominal)

Table 2B: Russia: personal income (nominal)

	max:min ratio	CV	IQR	Gini
1990	3.54	.25	343	.11
1995	13.9	.53	181.3	.24
2000	13.6	.66	934	.29
2005	11.2	.59	3059	.28
2009	7.6	.49	4756.9	.22

Source: Russian Federal State Statistical Service,

http://gks.ru/wps/wcm/connect/rosstat/rosstatsite/main/

Table 3A: China: Gross Domestic Product per province per capita

	max:min ratio	CV	IQR	Gini
1990	7.3	.56	846	.26
2009	7.7	.59	18555	.30

Table 3B: China: Mean household per capita urban income

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	max:min ratio	CV	IQR	Gini	
2001	2.44	.29	1869.1	.14	
2008	2.43	.27	3672	.13	

Source: Calculated from provincial statistical yearbooks

⁴⁴ Ibid., pp. 67-8.

Tuble 111: Onited States. gross state product per cupita						
	max:min ratio	CV	IQR	Gini		
1997	4.6	.36	9192	.14		
2009	5	.39	10308	.15		

Table 4A: United States: gross state product per capita

Table 4B: United States: median household income

	max:min ratio	CV	IQR	Gini
1989	2.1	.19	9033	.11
2008-09	1.8	.15	10244.5	.09

Source: Bureau of Economic Analysis, US Commerce Department http://www.bea.gov/regional/gsp/; US Census Bureau

Table 5: Brazil: state-level mean personal income (constant 1979 prices)

	max:min ratio	CV	IQR	Gini
1970	799	1.93	215759.4	73.8
1980	557	1.87	575093.9	71.3
1991	215	1.89	620558.9	68.4
2000	212	1.74	1488237	66.5

Source: Institute for Applied Economic Research (IPEA) Instituto de Pesquisa Econemica Aplicada http://www.ipeadata.gov.br

Table 6: India: state-level personal income (constant 1993/94 prices)

	max:min ratio	CV	IQR	Gini
1993-94	6.51	.456	3614	24
1998-99	8.32	.53	6425	27.4
2003-04	9.29	.561	7516	29.6

Source: Indiastat

http://hollis.harvard.edu/?itemid=|library/m/aleph|009321662

The results indicate that, by all measures, Russia's cross-regional inequality grew sharply in the 1990s and early 2000s before subsiding in the late 2000s. The drop was more pronounced for incomes than for output, suggesting that the social policies under Putin mitigated income inequality by raising incomes at the lower end of the distribution. Over the twenty years between 1990 and 2009, the gap between the richest and poorest region doubled for income and more than quintupled for output, and the span of the inter-quartile range rose almost 14 times for income and 27 times for output. For income, both the coefficient of variation and the Gini index doubled. Thus Russia's level of interregional inequality exceeds that of China by a considerable margin using any of these measures despite the fact that it has diminished somewhat in the late 2000s, as has that of China.

In comparative perspective, Russia's level of interregional inequality is less extreme. Let us start with the United States. Striking is the fact that cross-state disparities in the United States are quite modest

compared with any of the other four countries. Moreover, although interpersonal inequality in the United States has risen, inter-state inequality has dropped slightly in recent years. This suggests that the processes fueling our steadily rising income inequality are fairly homogeneous across the entire country rather than being concentrated in particular states. The extraordinary concentration of incomes in the top 1% and one-tenth of 1% of the population, which, rather than a sharp increase in the number of poor, is responsible for the rise in income inequality in America, is evidently a phenomenon occurring nationally rather than being concentrated in a few states.⁴⁵ In the US, overall inequality is high (the 90/ 10 decile ratio for household income in 2009 was 11.36, and the Gini index was 46.8⁴⁶) but there is relatively little difference among the states in their levels of inequality. Wang Feng notes that if total interpersonal inequality is disaggregated into its constituent elements, in the United States, differences in mean incomes across cities account for only about 4% of total interpersonal inequality, whereas in China, it accounts for half or more of total inequality.⁴⁷

We should observe that in the United States, there is no statistical relationship between a state's mean income and its level of inequality once the percent of its population that is black is held constant. But the black share of the population is strongly and positively related to a state's level of income inequality (but not to mean income). In the United States, therefore, as in other societies with deep class, ethnic or racial cleavages, the benefits of economic development are strongly skewed in favor of privileged strata, who may be distributed in roughly equal shares across territorial units.⁴⁸ In China and Russia, in contrast, the gap between the urban and rural populations and across territorial units accounts for at least half of total inequality.

Russia's level of interregional inequality is roughly comparable to that of India. Although we have figures only for the 1993-2003 period for India, it appears safe to conclude that India's economic opening increased income disparities across its states. All four measures of interregional inequality showed moderate increases over that decade. India's level of interregional inequality as of 2003-04, measured by the ratio of the richest to poorest, the cv, and the Gini index, was lower than those of Russia at the same time, but slightly higher than the level Russia had reached by the end of the 2000s. On the other hand, none of the countries in this group can touch Brazil for cross-regional inequality, even though three of the measures of inter-state inequality showed declines in the 80s and 90s. The coefficients of variation in income for Brazil are four times greater than those of Russia and India, and six times greater than those of China. More than in any of the other countries in the comparison group, processes of economic development in Brazil are highly concentrated geographically.

For China, interregional inequality fell slightly in the 2000s, but not as much as in Russia, and not if the inter-quartile range is taken as the measure. Over the seven years between 2001 and 2008, the inter-

⁴⁵ Atkinson, Anthony B. and Thomas Piketty, *Top Incomes: A Global Perspective*. (New York, Oxford University Press, 2010); Atkinson, Anthony B., Thomas Piketty and Emmanuel Saez, "Top Incomes in the Long Run of History." *Journal of Economic Literature* 49:1 (2011): 3-71; Piketty, Thomas and Emmanuel Saez, Income Inequality in the United States, 1913-1998. *NBER Working Paper Series*. Cambridge, MA, National Bureau of Economic Research: (2001).

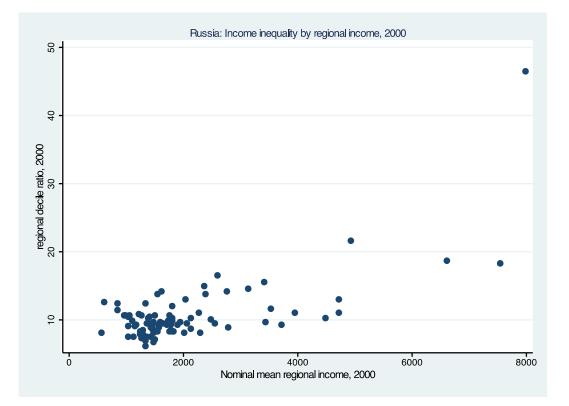
⁴⁶ US Census Bureau, Income, Poverty, and Health Insurance Coverage in the United States: 2009, P60-238, September 2010, September 2010, p. 40.

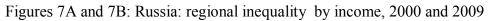
⁴⁷ Wang, *Boundaries and Categories*, p. 133.

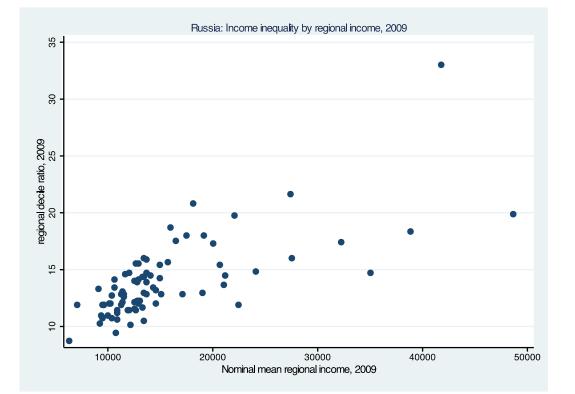
⁴⁸ Alesina, Alberto, Reza Baqir and William Easterly, "Public Goods and Ethnic Divisions." *Quarterly Journal of Economics* 114:4 (1999): 1243-1284; Easterly, William, "The Middle Class Consensus and Economic Development." *Journal of Economic Growth* 6:4 (2001): 317-335; Easterly, William, *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. (Cambridge, MA, MIT Press, 2002); Easterly, William and Ross Levine, "Africa's Growth Tragedy: Policies and Ethnic Divisions." *Quarterly Journal of Economics* 112:4 (1997): 1203-1250.

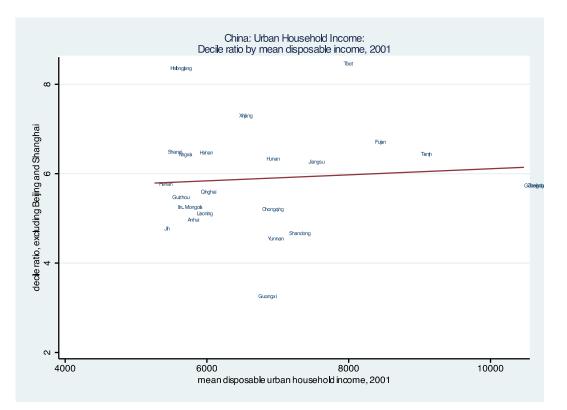
quartile range for mean urban household income doubled, although the Gini index and coefficient of variation fell very slightly (this would be explained by the fact that the mean rose slightly faster than the standard deviation). But the doubling of the inter-quartile range in a period of less than a decade indicates that the spread of values in the middle of the distribution was growing faster than the spread between the extremes. For gross output per province over the 20 years from 1990 to 2009, we see a much larger rise in the inter-quartile range as the differentiation among development levels was felt among the great majority of provinces. Even though the mean level of output rose, the standard deviation rose even faster, explaining the increase in the coefficient of variation. However, the gap between the wealthiest and poorest provinces grew only slightly.

Perhaps the most important question to ask of these (admittedly fragmentary) figures is how income growth over time is related to income inequality. Do regions that experience the fastest growth in incomes see the greatest increases in inequality? Figures 7A, 7B, 8A, and 8B suggest an answer. They indicate that in Russia at the beginning of the 2000s, there was a slightly positive association between mean regional household income and regional inequality, which grew still more pronounced by the end of the 2000s. That is, the higher the mean (nominal) income of a region, the greater its decile ratio. Income growth, therefore, was disproportionately concentrated in the highest-income strata, such that the greater the growth, the greater the income dispersion. China shows the opposite trend, at least with respect to officially reported urban household incomes. The slight positive association between province-level mean income in 2001 and the calculated decile ratio (excluding Beijing and Shanghai, which did not report decile income figures) turned negative by 2008. Of course, if Beijing and Shanghai had been included, it is possible that the statistical association would have been different, since it is likely that income growth in those prosperous city-provinces was accompanied by rising income inequality. As we noted above, in the richest provinces, the decile ratios for urban household incomes were very high. But it shifts from being slightly positive in 2001 to slightly negative in 2008. Still, the figure suggests that there is some mitigation of inequality in the poorer regions as the central government has raised incomes in poorer provinces through its "Western development" strategy.

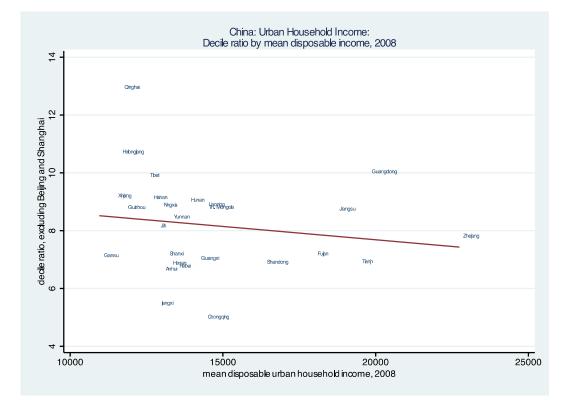








Figures 8A and 8B: China: province-level inequality by income, 2001 and 2008:



Often China's five coastal provinces, which have seen by far the fastest growth (stimulated by deliberate central policy aimed at stimulating investment in the provinces that could benefit the most from it), together with the four cities with province status (Beijing, Shanghai, Tianjin and most recently Chongqing), are contrasted with the inland provinces that have received less central investment and favorable policy treatment. If we combine the five coastal provinces and four rich municipalities into a single category, and compare them with the other 22 provinces, the difference in the increases in their incomes and wages is enormous. In 1980, the average urban household income in the two groups differed by only 13%. By the 2000s the difference was over 50% and there was almost overlap between the two. The change in the relative difference in their wage levels was even more dramatic--in 1980, the average urban wage in the coastal and municipal group was actually lower than that of the other provinces, although the difference was not statistically significant. By 2008, the average wage in the coastal and municipal group was 41% higher.

For both sets of provinces, the greatest gains in income went to the highest income decile. For the median non-coastal province, the top decile's income rose two and one half times from 2001 to 2008, and the middle quintile's income rose 2.2 times. In the coastal and municipal province group, the median province saw an increase of 2.3 times for the top decile, and 1.77 times for the middle quintile. So while growth was slightly faster for both the top end and middle income earners in the inland regions, the coastal and municipal provinces maintained their lead: as of 2008 both the top decile and the middle quintiles in the coastal and municipal group were still over 50% higher in income than their inland counterparts.

The Implications of Interregional Inequality

Leaders in Russia and China have both expressed concern over the destabilizing consequences of high inequality. A series of statements by Russia's leaders and reports by leading think tanks suggest serious concern about the consequences of rising inequality for long-term stability. For example, in his address to the State Council on February 8, 2008, President Putin declared that the current level of income inequality was "absolutely unacceptable" and should be reduced by taking measures to expand the share of the middle class in society to 60 or 70%. The head of a think tank affiliated with President Medvedev, Igor' Iurgens, often emphasizes that building the middle class is the key to the success of economic and political modernization. At a conference devoted to the problems of developing the middle class sponsored by INSOR in April 2008, he referred to the government's official "Strategy for the Long-Term" Social-Economic Development of Russia to the Year 2020" ("Strategiia 2020") which posits as a state goal raising the share of the middle class in the society to 50%. To meet the goal, lurgens declared that the number employed in small business should be raised from 20% or so, as at present, to at least 60%. But as Evgenii Gontmakher, deputy director of IMEMO, pointed out at the same conference, the middle class is not growing. Gontmakher emphasized that, above all, the middle class needs a sense of security, particularly retirement security.⁴⁹ The Higher School of Economics report on living standards cited above concludes that "the principal issue for the Russian economy and society is the current level of inequality....High level of inequality, the more increasing, can be the source of distrust in society, and therefore a threat to the stability [sic]."⁵⁰

⁴⁹ Gontmakher, Evgenii, Leonid Grigor'ev and Tat'iana Maleva, "Srednii klass i rossiiskaia modernizatsiia," *Vremia novostei*: (2008), 8.

⁵⁰ Andrushchak, G. et al., *Mode of Life and Living Standards of Russian Population in 1989-2009*. (Moscow, Higher School of Economics and Ekspert Magazine. XII International Academic Conference on Economic and

In China, the notion of a "harmonious society" became central in the 2000s as a complement to the overriding goal of economic growth. Party General Secretary Hu used the phrase "harmonious society" (linked to "social equity and justice" and rising living standards for everyone) no fewer than ten times in his address to the 17th Party Congress, as in the following formulation:

We must do our best to ensure that all our people enjoy their rights to education, employment, medical and old-age care, and housing, so as to build a harmonious society.

This spring, reacting to the turmoil in the Middle East, a senior official in China responsible for public security noted that mass incidents were "frequent occurrences" which he blamed on the fact that "social management and services are lagging behind social development." He promised to take steps to ensure a "harmonious and stable society."⁵¹ President Hu repeatedly calls for reducing "inharmonious factors" by a combination of political controls and skillful "stability maintenance."⁵²

It is common to cite the fact of rising mean incomes and rising consumption among the affluent strata in China and Russia as evidence of the growth of a "middle class." Business interests are, understandably, enthusiastic about the rise of the "middle class" in China, a stratum they define as households whose disposable incomes are sufficient to acquire durable and luxury goods and that hallmark of modern civilization, brand loyalty. It is a highly marketable category.⁵³ For example, McKinsey Consulting reports that it believes China will avoid the undesirable "barbell" distribution of income characteristic of poor developing countries; they forecast that incomes will rise in all strata, although in spurts. Ultimately, by 2011, they projected that the "lower middle class" would constitute about 44% of the urban population, and that by 2025, the upper middle class would comprise half of the urban population. The problem faced by McKinsey's clients was how to induce Chinese households to lower their savings rates and start spending a larger share of their income on consumer goods.⁵⁴ For the Chinese leadership, growth of the middle class is desirable. It would contribute to social stability by reducing the gap between rich and poor, and establish aspirational goals for the poor.⁵⁵

An expanding middle class is also regarded as desirable by commercial interests in Russia, who define it as an economic stratum capable of purchasing an apartment, a car, and other high-priced items; the state insurance company estimated that about 20% of the population fell into this category, ie households with at least \$25,000 per year in income.⁵⁶ Sociologists, however, define the middle class differently. Most define it according to the convergence of income, occupation, education, and self-identification. Most would place the share of the middle class in contemporary Russian society at 15-20%.⁵⁷

However, scholarly studies of middle class development in both societies reach similar conclusions: by any reasonable definition, the middle class is deeply heterogeneous and does not constitute a self-interested force. In Russia, approximately half the individuals that can be considered

Social Development, 5-7 April 2011), p. 72.

⁵¹ Wang Huazhong, "Moves on Way to Aid Stability, Harmony," China Daily, February 24, 2011.

⁵² Andrew Jacobs and Jonathan Ansfield, "Well-Oiled Security Apparatus in China Stifles Calls for Change," *New York Times*, February 28, 2011.

⁵³ Li, "Introduction: The Rise of the Middle Class in the Middle Kingdom,", p. 9.

⁵⁴ Farrell, Diana, Ulrich A. Gersch and Elizabeth Stephenson, "The Value of China's Emerging Middle Class." *The McKinsey Quarterly: 2006 Special Edition: Serving the New Chinese Consumer* (2006): 60-69

⁵⁵ Li, "Introduction," p. 10.

⁵⁶ Shishkin, "Srednii klass."

⁵⁷ Remington, Thomas F., "The Russian Middle Class as Policy Objective." Post-Soviet Affairs 27:2 (2011): 1-37.

middle class are employed in the state sector as state officials, military officers, teachers, and others whose livelihoods are paid by the state. Their outlook on distributional issues therefore tends to differ from those whose livelihoods depend on entrepreneurship.⁵⁸ Similarly, studies of the Chinese middle class tend to consider it highly dependent on state officials for their privileges, and certainly not a homogeneous or cohesive social aggregate. Some observers argue that the regime and the "middle class" have formed a tacit coalition to prevent any serious redistribution of income or privilege, an alliance the regime has reinforced by its dark warnings of the potential for social unrest.⁵⁹

Moreover, although the middle-income property-owning strata in China are undoubtedly expanding as a share of the population faster than in Russia, the rapid increase of top-end incomes in both countries that we have documented makes it hard to judge whether the income distribution is becoming more diamond-like in shape or whether most income gains are going to the top few percentiles of the distribution, as in the United States. The wider the gap between the mean and the median income level as inequality widens, the greater the potential pressure for redistribution, and hence for social and political tension.⁶⁰ In contrast is a situation that William Easterly describes as the "middle class consensus," where a majority of people share in the benefits of growth and there is no wide polarization across social classes or ethnic groups.⁶¹ For both Russia and China, therefore, Eva Bellin's portrait of "contingent democrats," social groups in late-developing capitalism whose heterogeneity and dependence on state power and privilege undermine their capacity for collective action, appears to capture an important truth about the character of the middle class.⁶²

Similarly, the spatial distribution of the groups labelled as middle class is crucial to the social and political consequences of their rise. For China, a middle income stratum concentrated in large, prosperous cities, residing in gated compounds and fearful of the discontent of rural and migrant workers, and heavily made up of public sector employees, is likely to support the regime's authoritarian policies to the extent that they preserve stability and defend against strong redistributive pressure. Observers of China differ over the degree to which the center has preserved the capacity to reduce interregional differentials. Most believe that after 1993, a fiscal reform enables the center to realize a larger share of tax revenues and use them to redress regional inequality. In particular, the state was able to target central investment funds in the "Western Development Program," which has raised incomes in several less-developed provinces through infra-structure development.⁶³ However, Barry Naughton argues that the longer-term success of

⁵⁸ Shkaratan, Ovsei I. and et al., *Sotsial'no-ekonomicheskoe neravenstvo i ego vosproizvodstvo v sovremennoi Rossii*. (Moscow, OLMA Media Grupp, 2009).

 ⁵⁹ Chen, An, "Rising Class Politics and Its Impact on China's Path to Democracy." *Democratization* 10:2 (2003): 141-162; Dickson, Bruce J., *Wealth into Power: The Communist Party's Embrace of China's Private Sector*. (Cambridge, Cambridge University Press, 2008); Tsai, Kellee S., *Capitalism without Democracy: The Private Sector in Contemporary China*. (Ithaca, NY, Cornell University Press, 2007); Chen, Jie, "The Orientation of the Middle Class Toward Democracy in China, (unpublished paper, Old Dominion University, 2011); Luigi Tomba, "Creating an Urban Middle Class: Social Engineering in Beijing," *The China Journal* 51 (2004): 1-26; Luigi Tomba, "The Housing Effect: The Making of China's Social Distinction," *China's Emerging Middle Class: Beyond Economic Transformation*. Ed. Cheng Li. (Washington, DC: Brookings Institution Press, 2010): 193-216.
⁶⁰ Acemoglu and Robinson, *Economic Origins*; Boix, *Democracy and Redistribution*.

⁶¹ Easterly, William, "The Middle Class Consensus and Economic Development." *Journal of Economic Growth* 6:4 (2001): 317-335.

⁶² Bellin, Eva, "Contingent Democrats: Industrialists, Labor, and Democratization in Late-Developing Countries." *World Politics* 52:2 (2000): 175-205.

⁶³ Barry J. Naughton, "The Western Development Program," in Barry J. Naughton and Dali L. Yang, Eds. (2004). *Holding China Together: Diversity and National Integration in the Post-Deng Era*. Cambridge, Cambridge University Press, pp. 253-293.

such state efforts may undermine incentives for locally-generated productive investment and fail to reduce disparities between eastern and western provinces. The state has also been able to expand pension and health care coverage to a wider share of the population, including in the countryside. Pension reform reflects greater central control over the pooling of pension funds.⁶⁴ Municipal governments now provide a minimal subsistence subsidy to the indigent.⁶⁵

Similarly, in Russia, the vigorous efforts under Putin to respond to the 2008-2009 crash by protecting incomes at the low end, though such measures as unemployment assistance programs, state aid to troubled enterprises and banks, and significant increases in pension levels, have brought about a levelling off in the rise of both interpersonal and interregional inequality. State infra-structure investment through the "national projects" have undoubtedly also boosted incomes in poorer regions. Incomes in the countryside have also benefited from Putin policies aimed at developing private farming.⁶⁶ The government's ability to direct state investment to offset differences in rates of growth and income levels across regions depends, though, on revenues from resource exports. The calamitous effects of the 2008-2009 financial crash, when Russia's GDP shrank by 7.9% in 2009 alone, shows how vulnerable Russia is in this respect. The government recognizes the problem. The deputy minister of economic development recently declared that if Russia did not diversify its economic model away from its dependence on natural resource exports, the middle class's development would be stunted and inequality would remain unacceptably high. Inequality in income and wealth, he stated, "is one of the most important factors of social justice."⁶⁷

I have argued that in Russia (and to a large extent in China as well), interpersonal income inequality rises and falls with income growth, and that interregional inequality is a function of trends in interpersonal inequality. The dismantling of the Soviet-era system linking employment, wages, and social entitlements has given way to a partially decentralized, partially commercialized and privatized set of mechanisms for determining earnings, employment, access to education and health care, pension rights and other social benefits. For the most part, the existing system of social policy is primarily aimed at preventing social unrest rather than reshaping private incentives for investment in productive activity yielding a long-term return. It is defensive rather than transformative. In Russia, more than in China, policies governing the labor market, pensions, social insurance contributions, and other issues are subject to deliberative bargaining involving business interests, and, to a lesser degree, labor. In China, the influence of organized business and labor is weaker still.⁶⁸ As weak as corporatist institutions are, however, the role of partisan electoral competition in aggregating and resolving redistributive conflicts between the competing interests of large social collectivities is entirely absent in both countries.

Thus in both Russia and China, the inherited authoritarian features of each regime leave broad social groups such as pensioners, labor, entrepreurs and public sector employees without effective representation and therefore without the means to take part in the formation of social policy. State officials retain wide autonomy to demand rents in the form of fees, tributes, gifts and bribes from economic agents as a cost of doing business but, paradoxically, lack the ability or the will to make more

 ⁶⁴ Jing Lin, "Changing Pension Policies in a Changing Society A Three-Factor Policy Reform Model," paper presented to Americal Political Science Association annual meeting, Chicago, Ill, September 1-4, 2011.
⁶⁵ Dorothy J. Solinger, "Authoritatian Assistance: Welfare and Wealth in Urban China," paper presented to Americal Political Science Association annual meeting, Chicago, Ill, September 1-4, 2011.

⁶⁶ Wegren, Stephen K., "Private Farming in Russia: An Emerging Success?" *Post-Soviet Affairs* 27:3 (2011): 211-240.

⁶⁷ Andrei Klepach quoted in Sergei Kulikov, "Vlast' v poiskakh strednego klassa," *Nezavisimaya gazeta*, September 8, 2011.

⁶⁸ Chen, Calvin and Rudra Sil, "Communist Legacies, Postcommunist Transformations, and the Fate of Organized Labor in Russia and China." *Studies in Comparative International Development* 41:2 (2006): 62-87.

than marginal adjustments in the social welfare system. Both states have dismantled the socialist universalism of the old entitlements system by privatizing, commercializing, and decentralizing public services rather than adopting a redistributive social policy negotiated between opposing interests. Both have favored business interests by lowering social taxes and benefits. The social policy that results is defensive: it mitigates some of the extremes of inter-regional and interpersonal iequality but fails to encourage joint investment by business and labor in productivity-enhancing public goods such as education and health care.

The combination of authoritarian political institutions and liberal economic institutions therefore leaves the state vulnerable to the pressure of those interests that produce rapid growth, such as natural resource sectors in Russia and foreign investors in China. Stronger institutions for consultation and coordination between the state, business, and labor could alleviate some of the redistributive tensions that result and that make entrepreneurial and professional groups dependent on the maintenance of authoritarian regime institutions. This is evident on the basis of my examination of the variation in regional regimes in Russia.⁶⁹ There I found that regional regimes that had built sturdier mechanisms for overcoming the coordination dilemmas on the part of local enterprises (in the form of directors' councils, parliamentary committees, business associations, and the like), the local authorities were also able to induce cooperation between firms and the government over the sharing of the costs and benefits of reform. The greater the level of pluralism and openness at the regional level, I found, the higher the investment rates on the part of firms, the higher the social spending by government, the lower the poverty rate, and the faster the income growth. Income inequality, however, was also higher.

A transitional state where administrative control has been weakened, whether by decentralization or the loss of traditional centralized monitoring mechanisms, faces a trade-off between distributional equality and autonomy for firms and social organizations. China and Russia have given regions and firms a great deal of autonomy to pursue their economic strategies, but have relinquished much of their power to supply public goods and services impartially, let alone to carry out a redistributive policy across individuals, generations and regions. Expanding the participatory arena for business and labor, and eventually for competitive political parties, would be one way to recapture control over the broader environment of economic reform. Russia undoubtedly has a more well-articulated system of consultation between interest-aggregating associations representing business and labor at the central level and in many regions than does China. But its growth rates are far slower than China's and the benefits of growth, in its highly resource-dominated economy, are far more unequally distributed across its vast territory. China's institutions for consultation and coordination are more weakly developed than Russia's, but it has made up for this by its remarkably high rate of economic growth. Nevertheless, in both states, institutional weaknesses, reflected in the rising levels of interpersonal and interregional inequality, have subverted the state's capacity to achieve its larger strategic goals.

⁶⁹ Remington, The Politics of Inequality in Russia.