

Dynamics of Regional Inequality in the Russian Federation: Circular and Cumulative Causality

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Abstract

Growing spatial differentiation is a major feature of competitive capitalism: rich metropolitan areas which maintain finance, research, and headquarter the service industries and government grow at the expense of agricultural, rural and traditional 'rust-belt' industrial localities. The empirical part of the paper shows that, with marketisation, these developments have occurred with increasing intensity in the Russian Federation; areas with material and human assets grow, whereas poor areas become even more deprived. The solution proposed by politicians predicated on orthodox economics is that the capitalist system has its own self-adjusting laws of reciprocal causality. Movements in one direction precipitate counter-forces which correct movements away from equilibrium. The paper demonstrates, on the contrary, that foreign direct investment goes to the more developed areas, that outmigration and unemployment are not reversed: a form of circular and cumulative causality characterises capitalist markets. Changes in one direction lead to processes which amplify such trends: rich and poor areas develop at an exponential rate and the differences between them increase. In the conclusion it is argued that market mechanisms are unable to reverse these developments. Only comprehensive state regulation can lead to greater equality between regions.

National and Regional Inequalities

In the Soviet Union differentials within and between regions were subject to administrative regulation, which sought to reduce divergences. Such policies, pursued by administrative means, could be implemented without economic costs being a serious impediment. Though the goal of policy in the Soviet Union was administratively to minimise unequal physical, social and cultural conditions, significant differences continued. Income was distributed unequally between geographical areas. Whereas the average for the Russian Federation in 1985 was 142 rubles, in Magadan it was over 300 roubles, followed by Sakhalin with 228; in Moscow average income was 195 rubles; at the other end of the scale were Volgograd, (126), Bashkortostan (119), and Dagestan (81)¹. Income policy was guided by other considerations, which cannot be detailed here, differentials favoured arduous and dangerous work as well as areas with severe climatic conditions. Data on poverty are not available, but differences in infant mortality rates indicate the unequal conditions between areas: in 1985, the Russian Federation had an average infant mortality rate of 20.7; higher rates pertained in Tyva, 44.4; Dagestan, 31.8; Buryatiya, 26.8; at the other end of the scale were: Kostroma, 18.6; Sakhalin, 17.9; Magadan, 17.3; and Tatarstan, 15.4². The unequal physical, social and cultural conditions in different localities were not overcome by administrative means, though certainly regional inequalities were much less than in com-

parable capitalist market economies.

The consequences of marketisation and competitive capitalism not only changed the form of inequalities but greatly amplified them both between and within regions. Here we consider income distribution and unemployment. The distribution of income became much more unequal. The legacy of the Soviet Union gave a Gini coefficient of income distribution of 0.26 in 1991, which was comparable to Western social democratic countries such as Denmark. By 2012 it had risen to 0.420—comparable to the most unequal capitalist societies³. As illustrated in Figure 1 overleaf, the major changes took place in the early 1990s; from 2000, inequality kept rising, though more slowly and very slightly tapered off between 2010 and 2012.

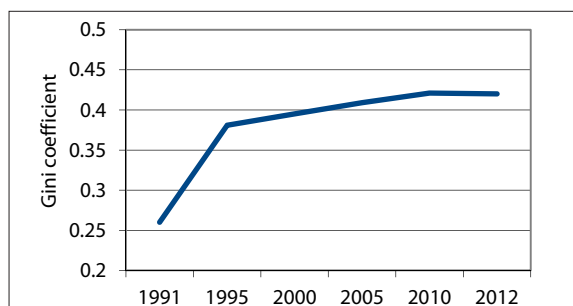
The grossly uneven distribution can be illustrated by comparing the proportion of income received by the top 20% of recipients to the bottom 20%. Whereas, in 1991, the top 20% of income recipients received 30.7% of the income, their share had risen to 47.7% in 2010, with a slight fall to 47.6% in 2012; at the other end of the scale, in 1991, the bottom twenty percent received 11.9% of the income, whereas by 2012 it had fallen to only 5.2%. The increasing wealth was appropriated by

1 *Regiony Rossii 1997g.* Moscow: Goskomstat, 1997, vol 1, pp. 454–456

2 *Regiony Rossii 1997g.* Moscow: Goskomstat 1997, vol. 1, pp. 402–404

3 *Regiony Rossii 2012g.* available at <www.gks.ru>, Table 5.8 supplemented by other years and *Rossiyski statisticheski ezhegodnik 1998.* Goskomstat Rossii. Moscow 1998, table 8.18, p.223. Data for 2012 from: *Sotsial'no-ekonomicheskoe polozhenie Rossii 2012g.* Moscow: Rosstat. p.242. The Gini coefficient is an index measuring income distribution: an index of 0 indicates a completely equal distribution and 1 a distribution in which the top group takes all the income. Hence the lower the index, the greater the equality, the higher the more severe the inequality.

Figure 1: Gini Coefficients 1991–2011, Russian Federation. 2012

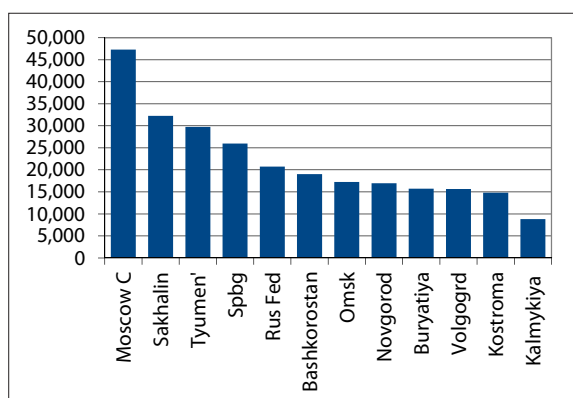


Source: Rossiyski statisticheski ezhegodnik, Goskomstat Rossii: Moscow. (Various dates) and Sotsial'no-ekonomicheskoe polozhenie Rossii 2012g. Moscow: Rosstat. p. 242.

the rich: between 1991 and 2011, money incomes doubled for the top income group (the 20%) whereas the bottom group received only 56% of the 1991 income⁴. Over time, differentials did not decrease, but continued on an upward trajectory. When we disaggregate these trends by region we see parallels as well as regional disparities which amplify these differences.

Figure 2 shows the differences in monthly income in 2011 for a number of regions: Moscow was by far the highest with an average of 47,319 rubles, and Kalmykiya at the other end had an average of only 8,829 rubles—a significant increase in the income range since 1985. The average for the Russian Federation was just over 20,000 rubles. These data clearly indicate severe regional inequalities.

Figure 2: Average Monthly Income Selected Regions (2011)

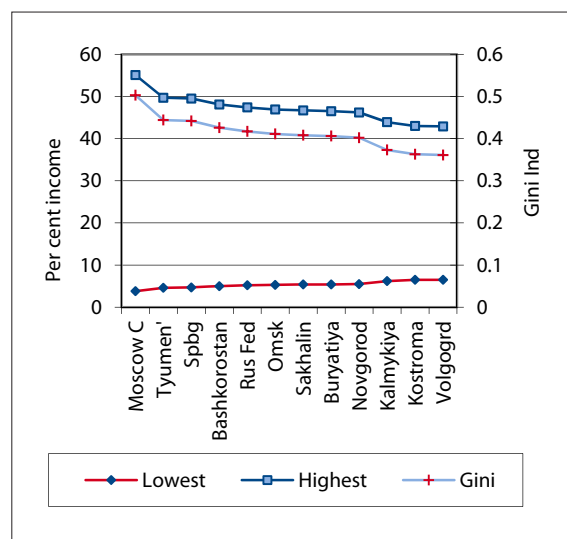


Source: *Regiony Rossii 2012g*, Federal'naya sluzhba gosudarstvoy statistiki, available at <www.gks.ru>, Table 5.2. Rubles per month, 30 rubles = 1 US dollar (in 2012).

⁴ L. Ovcharova and D. Popova, Dokhody i raskhody Rossiyskoy domashnikh khozyayst. Mir Rossii, Vol.22, no 3, 2013. (pp. 3–34), see p. 16.

These average incomes were also accompanied by severe social inequality within the regions: all regions have their share of rich and poor. In 2011, for the Russian Federation as a whole, the highest 20% received 47.4% of the income and the bottom 20% 5.2%. As noted in Figure 3, Moscow is not only the richest but also the most unequal area: the top 20% received 55.1% of the income of the whole city. Though data are not given in this source, it seems likely that the top 2% would receive a considerable proportion of the total income. The bottom 20% received only a miserly 3.8%. While Moscow was by far the richest region, the poorest strata received proportionately even less than the average. The differentials in the poorer regions are not quite so marked, though the pattern is similar and the Gini coefficient is universally high. Volgograd and Kostroma, which had the most equitable distribution of income, each had comparable differentials of 43% and 6.3%.

Figure 3: Income Earned by Top 20% and Bottom 20%, Gini Coefficient: Russian Federation and Selected Regions 2011.



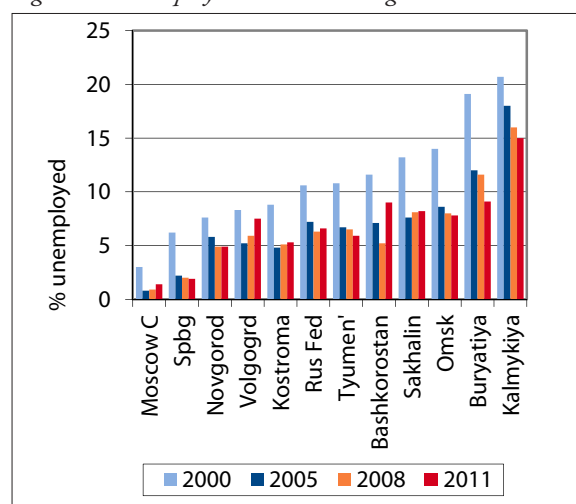
Source: *Regiony Rossii 2012g*, available at <www.gks.ru>, Table 5.8. Gini index right hand scale (shadow line).

The conclusion here is that there is a polarisation between the rich and the poor in the richest areas which is paralleled, though to a slightly less unequal extent, in the poorer regions. The same economic principles work in all regions, despite some being more poorly endowed than others. Hence differences within regions are as important socially as variations between regions. Though some regions are poorer, they all distribute income in a similar and extremely unequal manner.

National and Regional Unemployment

These effects of transformation policies were mirrored in the social sphere which can be illustrated by the incidence of unemployment. As noted in Figure 4, recorded unemployment was extremely high in the early years of transformation; it fell consistently after 2000, with the average for the Russian Federation of 6.6%. These figures underestimate the real unemployment level, but are useful for comparative purposes, as similar data collection methods are used throughout the RF. As we may note from study of Figure 4, there are significant regional variations.

Figure 4: Unemployment: Various Regions 2000–2011



Source: Goskomstat Rossii, *Regiony Rossii 2012g*, Table 4.15. <www.kgs.ru> accessed 9 July 2013 and *Rossiyski statisticheski ezhegodnik 2011g*, Moscow 2012, Tables 8.2. Data based on surveys and other indexes and includes an estimate for *skrytaya* (not registered) employment. Data on people officially registered as unemployed (and seeking benefit) show even lower levels.

In 2010, areas with 10% or over unemployed included the Republic of Komi (10.3%), Kaliningrad (10.6%), Kalmykiya (15%), Dagestan (12.8%), Ingushetia (49.7%), Kabardino-Balkaria (12.7%), Karachaevo-Cherkassia (10.3%), Chechnya (43.1%), Mari El (10.5%), Kurgan (12.2%), Altay (12.3%), Buryatiya (10.4%), Tyva (22%), Zabaykalski kray (11.4%), Irkutsk (10.2%).⁵

These figures lead one to suppose that the social costs of transformation were carried disproportionately by the non-European republics and areas of the Russian Federation and many of these had high concentrations of non-Russian ethnic groups. By 2010, there were no regions with an unemployment rate of 10% or over in the cen-

5 Source, surveys carried out by Federal'naya statisticheskaya sluzhba, See *Rossiyski statisticheski ezhegodnik 2011g*, Moscow 2011, Tables 8.2.

tral federal okrug, but there were two in the southern federal okrug, five in the North Caucasus, one in the Privolzhsky federal okrug, one in the Urals; Siberia had five, and the Far East region, none.

In the neo-liberal economic framework, the logic of these social and regional inequalities is two-fold. First, the freedom of movement should stimulate labour to move from areas of low-employment and low income to more prosperous ones. Second, capital should flow to areas of cheap labour. An important implication here is that dislocations are temporary; the market induces countervailing forces which lead to a new and higher level equilibrium. In theory, the greater the freedom of movement of labour and capital, the higher the tendency for equalization. There is a self-adjusting market mechanism which maintains equilibrium. If it is unprofitable for capital to move, then there is a migration of labour.

Migration

The imposition of a market system led to significant population movement within the borders of the Russian Federation, as well as significant immigration from displaced *Rossiyan* in the new independent states. The latter as a proportion of immigrants for the Russian Federation averaged 13.5% in 2000, 8.5% in 2005 and 10.4% in 2011⁶. Figures 5a–5g overleaf and on p. 6 show the aggregate level of migration in 1990 and each year from 2000 to 2011. The data are aggregated to give an index of net immigration: calculations are based on immigration of over 500 per 100,000 of the population and all movements with a negative figure (i.e. regions experiencing population loss). The first entry in each graph is the average for the district as a whole; positive migration (indicated by a plus) lists those regions which have a total net immigration of 500 or more for the whole period; all the areas with a net emigration are included; those with a net migration of less than 500 are ignored. These six figures capture the balance of migration for all the regions of the Russian Federation, up to 2011 (+ is a balance of net immigration to the area, - denotes a net outflow).

There is a clear regional differentiation and some major differences within regions. The Russian Federation as a whole recorded a net immigration, for the whole period, of 272 (per 100,000). This is explained by the movement of former citizens of the USSR returning from the new independent states to the Russian Federation: for example, in 2000, 13.6% of arrivals and in 2011, 10.4%, were from the former Soviet Union outside Russia, in the same years there were 6.8 and 1.2% of total immigrants from abroad.

6 See: Table 3.18 *Raspredelenie chisla migrantov po napravleniyam peredvizheniya*, *Regiony Rossii 2012g*, For Moscow the comparative figures were: 21.5, 12.8 and 14.4%.

Figure 5a: Net Regional Migration by Geographical District: Central Federal Migration Coefficient 1990, 2000–2011

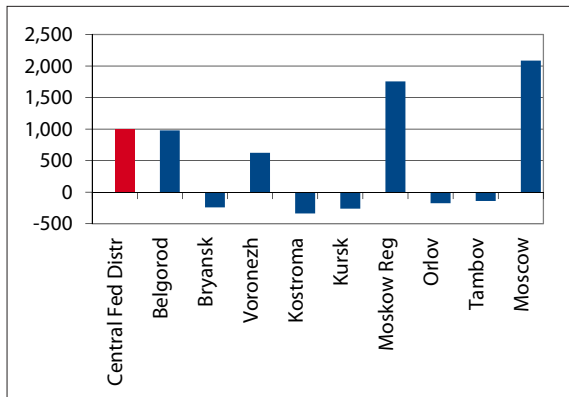


Figure 5b: Net Regional Migration by Geographical District: North West Federal Distr Migration Coefficient

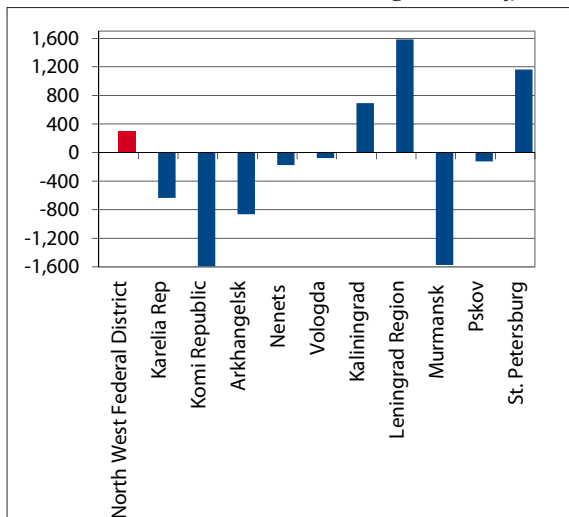


Figure 5c: Net Regional Migration by Geographical District: South Fed Distr and North Caucasus Fed Distr

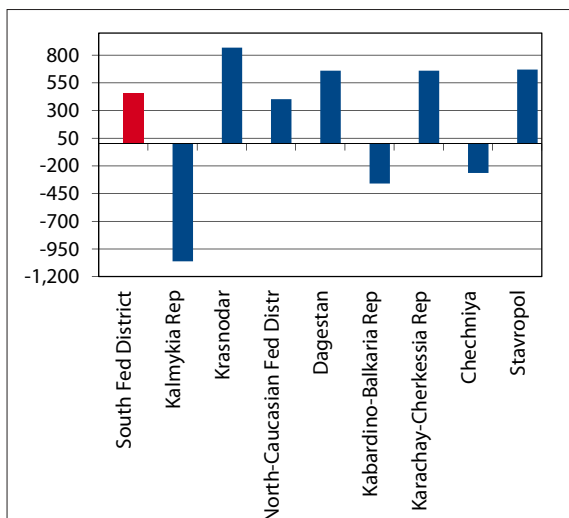


Figure 5d: Net Regional Migration by Geographical District: Privolzhsky Federal District

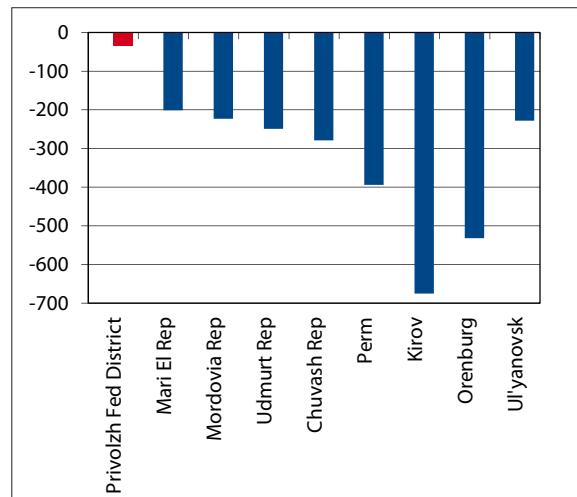


Figure 5e: Net Regional Migration by Geographical District: Urals Federal District

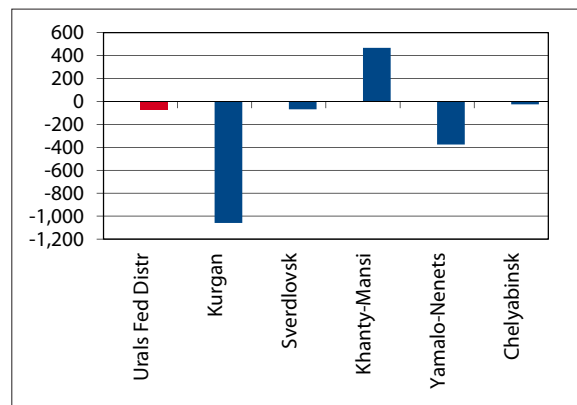


Figure 5f: Net Regional Migration by Geographical District: Siberian Federal District

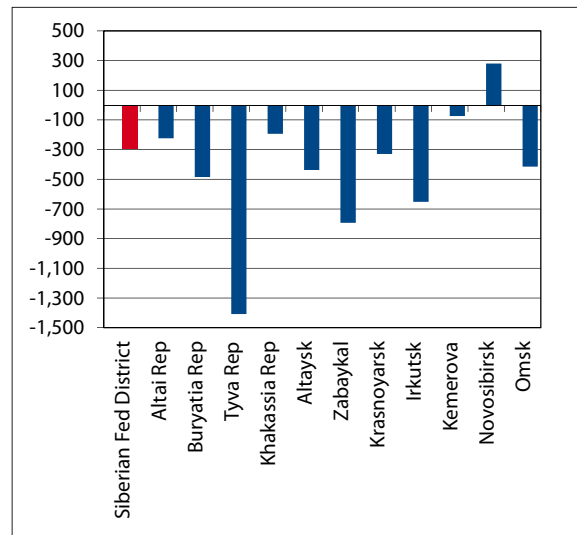
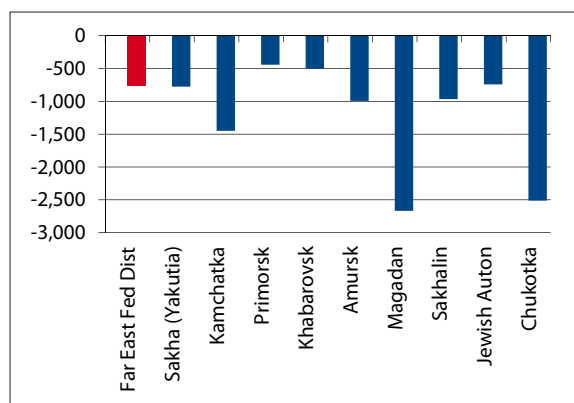


Figure 5g: Net Regional Migration by Geographical District: Far East Federal District



Figures show the balance of migration (immigration less emigration).

The Central Federal region had the highest number of net immigrants (my index measured 999), with Moscow City, with an index of over 2000, (closely followed by Moscow oblast') outstripping by far any other region (Leningrad oblast' and St Petersburg came next with indexes of 1584 and 1163 respectively); the southern areas also had a net increase (453).

The regions of greatest population outflow were the Far East District with an index of -768 (Magadan -2669, Chukotka -2513), Siberia had a net outflow of -291 (Tyva -1808); the Urals had an outflow of -73 (Kurgan -1080). Privolzhje had a net emigration of -35 which included many national republics. National ethnic minorities figured disproportionately in population movement. These areas were ones which had a continuous export of people.

Orthodox economic theorists contend that capital will move to areas of low pay, thus leading to development and a higher level of economic equilibrium than previously. Table 1 lists areas which had 1% or more of the share of foreign investment in any of the years 2005, 2009 and 2010 and these shares are aggregated to give an index of foreign investment for three years.

With some notable exceptions (Sakhalin, Tyumen, Tatarstan, Sakha, Yamalo-Nenets and Komi Republic), foreign investment was attracted to the European districts of the Russian Federation, especially Moscow which most years attracts around half of the total foreign investment. These areas attracted investment in natural resources. The remaining 13 regions defined above account for approximately 30%.

In order to test whether foreign investment is attracted to areas with high unemployment and low wages, we need to consider the relationship between foreign investment and unemployment levels. Table 2 shows the level of unemployment of each area in the second column and the

difference from the Russian average in the third column for the year 2000. A plus sign indicates that the level of unemployment in a region was less than the average for the Russian Federation, a minus sign indicates the opposite—unemployment was more than the national average. Columns 4 and 5 repeat the exercise for the year 2011.

Table 1: Sum of Shares of Foreign Investment 2005, 2009, 2010 (Index)

Moscow City	155.1
Sakhalin	19.5
Moscow Obl	16.0
St. Petersburg	13.8
Tyumen	10.7
Chelyabinsk	7.6
Tatarstan	7.1
Sverdlovsk	5.0
Samara	4.0
Sakha	3.8
Leningr Obl	2.8
Krasnoyarsk	2.2
Yamalo-Nenetsk	2.0
Komi rep	1.9

Foreign investment. From Federalnaya Sluzhba gosudarstvennoi statistiki, Rossiyski Statisticheski Ezhegodnik 2011. Moscow, 2011 Table 23.21

Table 2: Changes in Unemployment Levels in Areas of High Foreign Investment 2000, 2011

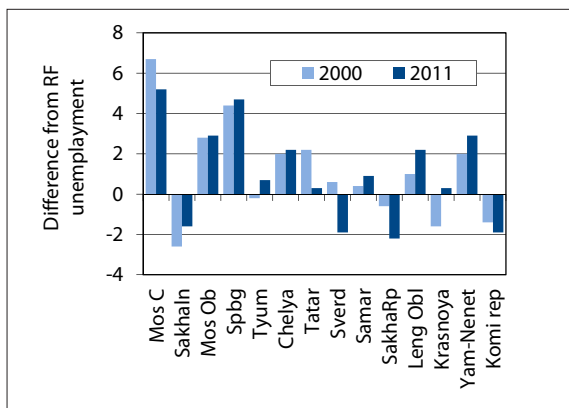
	Level of unemployment 2000	Difference from average RF	Level of unemployment 2011	Difference from average RF
Rus Fed	10.6		6.6	
Moscow City	3.9	6.7	1.4	5.2
Sakhalin	13.2	-2.6	8.2	-1.6
Moscow Obl	7.8	2.8	3.7	2.9
St. Petersburg	6.2	4.4	1.9	4.7
Tyumen'	10.8	-0.2	5.9	0.7
Chelyabinsk	8.6	2.0	4.4	2.2
Tatarstan	8.4	2.2	6.3	0.3
Sverdlovsk	10.0	0.6	8.5	-1.9
Samara	10.2	0.4	5.7	0.9
Sakha	11.2	-0.6	8.8	-2.2
Leningr Obl	9.6	1.0	4.4	2.2
Krasnoyarsk	12.2	-1.6	6.3	0.3
Yamalo-Nenetsk	8.6	2.0	3.7	2.9
Komi rep	12	-1.4	8.5	-1.9

Minus = more than average unemployment

Plus = less than average unemployment

In 2000, foreign investment went predominantly to areas with *below average* unemployment. Only 4 had above average (Tyumen, Sakhalin, Sakha, Krasnoyarsk and Komi Republic) and these were all areas with natural resources. Very little had changed by 2011; again only Sakhalin, Sverdlovsk, Sakha and Komi had more than average unemployment. These figures are summarised on Figure 6.

Figure 6: Unemployment in Areas of High Foreign Investment and Unemployment 2000, 2011



Minus = more than average unemployment in Russian Federation
 Plus = less than average unemployment in Russian Federation

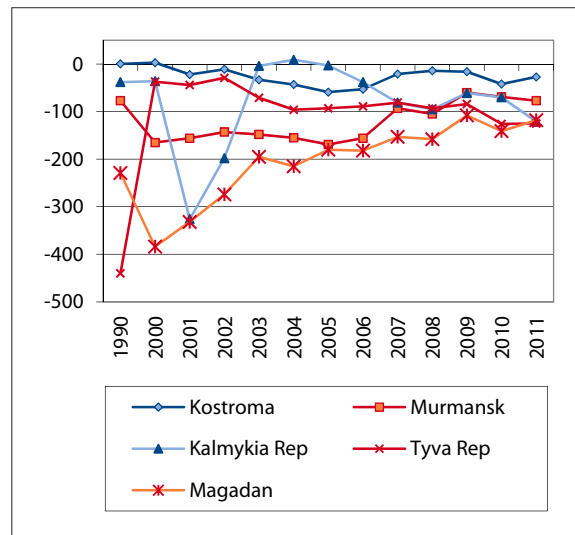
A Critique of Market Policies

The conventional wisdom is that capital will flow to those areas where costs of production (particularly labour) are lower and thus there will be an equalisation of capital. The analysis above illustrates that this does not happen. Rather than ‘countervailing forces’, the unequalising tendencies reinforce each other. Essentially, initial inequalities are amplified in a pattern of circular and cumulative causation⁷. In equilibrium economics, a negative change in the economic system will lead to a countervailing tendency to reverse the induced change. Hence, if a factory closes workers are made redundant, the conventional economist’s response is that they will seek other work, if none is available, they will either start their own businesses or accept lower wages and hence attract investment which will provide new employment. In this way a new equilibrium is attained.

This does not happen: countervailing forces do not equalise conditions. On the contrary the system moves in the same direction. Areas suffering population loss

are illustrated in Figure 7. These areas had a continuous outflow of population which was not corrected by inward flows of investment. Social processes are cumulative: rich areas become more prosperous and poor ones become worse. This is illustrated above by the relationship between foreign investment and unemployment—investment is not attracted to areas of high unemployment. There is no stimulus for investment as the unemployed have low spending power and the lack of economic demand leads to decline in retail trade. There are important social consequences: the mental and physical health of the unemployed suffers, they incur debts, and their family life disintegrates. If there is free movement of labour, workers move elsewhere hence changing the age and sex structure of the areas of origin thus making the remaining labour force less viable.

Figure 7: Areas of Population Loss 1990–2011



The declining economy leads the tax income of government to fall concurrently with the rising social and economic needs of the depressed area. Governments then adopt ‘austerity’ measures thereby again lowering public welfare—educational levels fall, poverty increases. Social stress increases. The area becomes even less attractive for economic and social development. The market economic mechanism in poor areas leads to poverty, and unemployment stimulates emigration for those able to move. There were no countervailing movements of capital and consequent economic and social development to these regions.

To remedy the negative downward spiral, government intervention takes place with policy initiatives which seek to reverse the trend: public investment, support for private initiative, vocational training, and a modicum of income support—sometimes aided by charity. Invariably, such measures can only address limited aspects of

⁷ Here I follow the reasoning of Knut Wicksell and Gunnar Myrdal, *Economic Theory and Underdeveloped Regions*. London: Duckworth, 1957. Wicksell correctly pointed to the self-sustaining and cumulative process of inflation, which was particularly applicable to the post-socialist economies in the early years of transformation.

the problem as unemployment and its consequences are structural in character and remain unresolved. From the point of view of economic doctrine, the private sector should drive the market, not the state. Government intervention is not an economic consequence of the market but an administratively induced programme to counter the downward spiral engendered by the market. The neo-liberal perspective regards such intervention as counter-productive and an obstruction to the market mechanism.

Poverty has no countervailing power: it gives rise to poor health and low productivity and thus poor areas have little attraction for investment. The dynamics of the free market give rise to greater inequality. Free movement of people, goods, services and capital does not lead to equalisation but continues trends in the same direction. The other side of the cumulative and circular paradigm is that rich areas become richer: they attract further investment which has a multiplier effect. Investment leads to employment and higher spending levels which attract workers and their families—immigration to prosperous areas rises. House building and retail trade are stimulated. Profits rise. The population structure is skewed towards the young and active, who require less state benefit. Such strata benefit and advocate more freedom. Political movements in rich areas, which transfer tax income to poor ones, experience opposition to redistribution. In this scenario, cities like Moscow become a centre of demonstrations for neo-liberal reforms—to reduce state spending and reduce taxes.

Labour moves from the undeveloped to the developed countries leaving the old and poor in the former. Labour pays the social cost for relocation. Rich areas are a magnet and draw qualified manpower. Capital moves to the rich areas because there is greater demand and they are economically and politically more secure. Hence free movement of labour, capital and services does not lead to an equalisation of conditions. On the contrary—the most favoured localities enjoy internal economies, are fortified by rising profits which attract bank loans and investment, and consequently enjoy continued growth and prosperity, while the least favoured localities stagnate.

From a developmental point of view, profitable investment is derived from exploitation of natural resources and the sale of consumer goods (expensive cars, kitchen appliances, mobile phones, coffee shops and top of the

market restaurants). The spending of economic rents by the rich leads to conspicuous consumption and the building of shopping malls which fuel, by example, the ethic of consumerism. A negative consequence is that social goods (public works, schools, health) are neglected. Moreover, privately owned profits, which could be used for internal investment, flow from the rich areas (Moscow, Sakhalin) to the economic havens outside where the same process is reproduced. The expatriate wealthy communities distort the housing market in their regions of settlement (e.g. London) and distort foreign markets—the lavish unbounded investment in the football industry by foreign oligarchs (e.g. Chelsea FC) creates unfair competition and an elite of super sports' companies. The circular causality, on a global scale, reinforces the vicious circle of power, wealth and success of the rich companies to the detriment of others.⁸

Conclusions

The conclusions of this paper are that orthodox economic policies lead cumulatively to greater regional and social inequality. Cumulative circular causality, rather than reactive corrective causality is at the root of development and de-development. The post communist reformers have either rejected these arguments or were unaware of them and have advocated free market policies which are mediated to some extent by state involvement. Neo-liberal economic theory is an ideology which legitimates political power which, in turn, favours interests which gain from the operation of the market. State involvement can modify the outcomes of market policies. But it is powerless to reverse them as the economic instruments of private corporate property, working through the market, possess allocative economic power; the pervasive ideology of market consumer capitalism is also a form of political power delegitimising state coordination. An alternative ideology (involving greater state regulation through de-privatisation, the institution of a national plan which prioritises social and regional equality) is an essential requirement to advance different policies designed to stem the current trend to regional polarisation. Nothing less than a change in the ideological 'taken for granted assumptions' to embrace ideas of post-Keynesian socialism or some form of national organised capitalism is necessary to overturn the faulted neo-liberal models of free market competition.

About the Author

David Lane is an Emeritus Fellow of Emmanuel College at the University of Cambridge. His recent work includes; *The Capitalist Transformation of State Socialism: The Making and Breaking of State Socialist Society and What Followed*. London and New York: Routledge. 2013.

⁸ See W. Arthur Lewis, 'Economic Development with Unlimited Supplies of Labor,' *Manchester School of Economic and Social Studies*, Vol. 22, May 1954. pp. 139–91.