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# **Conference Paper**

Forecasting Russian regional social-economic development and its adaptation to the world economy

42nd Congress of the European Regional Science Association: "From Industry to Advanced Services - Perspectives of European Metropolitan Regions", August 27th - 31st, 2002, Dortmund, Germany

# **Provided in Cooperation with:**

European Regional Science Association (ERSA)

Suggested Citation: Lipets, Yuli; Treivish, Andrei (2002): Forecasting Russian regional social-economic development and its adaptation to the world economy, 42nd Congress of the European Regional Science Association: "From Industry to Advanced Services - Perspectives of European Metropolitan Regions", August 27th - 31st, 2002, Dortmund, Germany, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at: https://hdl.handle.net/10419/115704

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# Forecasting Russian Regional Social-Economic Development and its Adaptation to the World Economy

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On such a full sea are we now afloat, And we must take the current when it serves, Or lose our ventures.

William Shakespeare

The two-dimensional, both content and spatial, prognostic language can help to overcome the one-track minded character of some macro-economic models. It requires an analysis of spatial hierarchy and of interaction (co-operation, contradiction) between its levels. Our view of Russian economic future is a combination of at least two views: *from above / outside* and *from below / inside Russia*. The first view concerns the need of Russia's economic adaptation to the new global trends and international competition. The second approach deals with regional and local specifics, inequalities and technological, informational and social adjustment abilities.

A cyclic-synergetic concept of global economic development since 1800 (graphs will de applied to the report) hardly needs many comments. Three questions are under discussion:

- If the dynamics, accompanied by deepening international gaps (in spite of decolonization etc.), will diminish them in the early 21st century?
- Does an acceleration compress a standard Kondratieff wave to some 35-40 years, at what spatial scale (local, national or international) this occurs, and what price (political and financial mobilisation, social discontent or cultural uniformity) the skippers pay for?
- What will be the technical and spatial base of the next (up or downward) Kuznets in the current fifth Kondratieff (2000-25)?

We start from the assumption that the known inertia, together with the law of 'necessary variety', prevent the international division of labour from dramatic shifts during at least a quarter of this century. Neither the booming Asian and other NIC nor the incomes of oil exporters, nor a neo-Keynesian economics disagree with the fact that the information, R & D and, most probably, bio-tech based economy restrict the number of the most developed nations.<sup>i</sup> To join

their elite club will be as hard as before for Russia (like anybody), while the number of semiperipheral "middle class" competitors will grow.

The global economic crises depends on the mentioned gaps and instability of the post-Breton-Woods monetary system. The chain of financial crises (Mexico-1985, SE Asia-1997, Russia-1998, Argentine-2001) forms the environment in which Russia's economy found itself after January 1992. Some growth of less developed economies and personal incomes (up to the UN 'basic needs' level) may diminish the risk of future crises. For all that, the 'southern' claim on the 'North' may be readdressed to the rich strata inside the 'South' proper. Moreover, the abrupt fall of the American realty and car demand will quickly lead to collapse the US and then, according to the dominoes principle, the whole World economy.

For all worth of anti-consumerism for the destiny of Biosphere and Mankind, there will be a long transition to an ecology-based economic era when, say, Russia (as a 'great environmental power') would be able to enrich itself at the expense of its fresh waters, and atmosphere, etc. Many compensatory mechanisms must be gradually introduced during decades to prevent the crisis of an impetuous transition a sort of which has been recently tested in our country.

Anyway, global economic cyclicity affects the prospects of Russian export sectors. In this context, the nature of the nearest half-Kondratieff acquires an applied significance: if it is an uprising stage, the oil, gas, metals, fertilisers and other Russian exporters' prices will grow or remain high; if not, their incomes may go down.

Strategic priorities also matter. The scientific community has few doubts about the global economic system in the 19th and 20th centuries, but again three questions remain disputable:

- Do the long-term growth indices of advanced countries depend on their individual features rather than on common and global socio-economic trends?
- Which long-term economic strategy was and is more adequate for the less developed nations, a pro-export one or an import substitution?
- Were there one single world market or the two different, capitalist and 'socialist'?

To answer the first question, an empirical regression between the unified sample of 16 DC 1870-1989 growth rates (from Maddison, 1991) and dummy variables for each state was found. The analysis revealed the key role of common and temporal factors, together with general economic levelling within the DC team (higher rates of less developed) in comparison with their specific indices, though varying.

The second question has been subject of discussions, especially rough in larger developing countries during the last 50 years. The results for near 100 states, even more different in terms of space, population, resource and R & D potentials, demonstrate the evident priority of an aggressive export-oriented strategy and a subsidiary role of the import substituting activities, although each national industry depends on its own cost-profit ratios.<sup>ii</sup>

The third question was extremely important for former Russia. In contrast to I.Wallerstein (1979) who denied the dual world economic system (with no statistical analysis), we argue that an 'Eastern block market' based on state monopoly of foreign-trade and on its own price system (only partly connected with the western) did exist during the Cold War decades. It collapsed in 1989, with the 'world-based pricing' in the former COMECON accounts, and then in the USSR in 1992, with general economic liberalization and a havoc in *the Soviet system of low-level wages, costs and prices*.

The system affected economy, everyday life, settlement and communication systems since the early 1930s when the ordinary financial instruments and ratios (between the sectors, labour productivity and consumption, domestic and external markets, rouble and foreign currencies, etc.) fell victims to the values of forced industrialisation. For its well-known defects, the low-cost system was not only arbitrary but tended to a strange balance and harmony. For instance, cheap consumer goods were balanced by low wages; cheap energy defined low transportation tariffs which promoted strong integration of the Soviet economic and social space.<sup>iii</sup> The intra-COMECON trade had similar multilateral economic and monetary instruments based on the so called 'transfer rouble' the exchange rate of which still is disputable. The accounts in world prices and hard currency since 1989 resulted in disequilibrium and conflict around old debts or in barter transactions (up to 20 percent of the intra-CIS turnover).

Today, the third question can attract mostly historians, as some 85 percent of reported Russian exports and 70 percent of imports are hard currency paid. Russia was one of the first in the post-Soviet space to turn its external trade toward the West. At the same time, *the transitional price system*, with its disequilibrium *not between demand and supply but between different supply prices (on the one side of the equations)* has no adequate description in the world economics. Such a discord is rooted in an extremely uneven inflation the champions of which were the *natural monopolies* and exporters. During the 1990-98 period of continuous industrial decline, the electric power sector had been a steady inflator which compensated each percent (20 in total) of its physical production losses by 512-fold price rise. The light industries, facing the sharpest competition of imported goods, could compensate each of its 88 percent of loss by a 4-fold inflation. Hence, the primary sectors have become much more notable in the Russian industrial structure affected by a *thirdworldization*.

The sectorally uneven price race was accompanied by growing spatial disparities characteristic of Russia. Regions in one country where prices and incomes of ordinary goods and services differ by a factor of 10, 20 or more are unknown in Europe. Budgetary gaps separated the smaller group of donor regions from the majority of recipients. The runaway inflation of fuel and energy prices soon elevated transportation costs and tariffs and pushed many local markets to autarky. The former low-price system supported distant links, supply of the Far North, and mass tourism, etc. The unstable transitional system oppress them and questions the very existence of the domestic air and water transports.

After the 1998 crisis Russian monopolists agreed to curb domestic energy and transportation tariffs. Then the cost-pushed inflation in industries lagged behind the sellers' prices which stimulated manufacturers, but soon the growth of world prices and border gradients resulted in series of 'petrol' and other contraband crises. Both gradients and shadow exports, together with the problem of socially unacceptable domestic tariffs, still exist today.

New prices, property sectors, competition, decay of centralism and state protection – all these result in market re-evaluation and restructuring of both sectoral and regional profiles. So, "within any given country, we find not one transition but many occurring in different domains – political,

economic and social – and the temporality of these processes are often asynchronous..." (Stark, 1992, p.19). The statement is even more relevant to the regional domains and diversity of intra-Russian transition.

Not surprisingly, Russia, according to D.L'vov (2001), has *two different images* at home and abroad: of a *backward non-competitive* and of a *potentially rich country*. L'vov shares the second notion, though 'hidden', while the first is grounded by another patriotically minded economist, A.Parshev in his book "Why Russia is not America" (2001). What looks funny, both views are *neogeodetermined*. L'vov strengthens Russia's mineral wealth which is "twice as rich as the American" and makes, in form of rent, the 3/4 of pure profits (capital forms the 1/5 and labour the 1/20). Parshev, in turn, argues that the severe climates ("we live where nobody else lives") and long distances make Russian production too expensive to be efficient, competitive and attractive for foreign investors.

The truth may lie somewhere in between. What we agree with, is the Parshev's thesis that only 15-20 million (some 20 percent) of the Russian able-bodied population can survive around relatively successful mining and material processing. The sectors and corresponding regions suffer from antidumping policies of our key partners, such as European Union, USA, India and even some CIS states. China alone was discriminated worse before the country joined WTrO, but the result can be doubtful for it, and the more so for Russia.

These has been the conditions of Russia's market adaptation during the last 10-15 years. The period seems insufficient to forecast what can happen with its economic space in the next 20-25 years. On the other hand, the socio-economic landscape, with its West-East, North-South and centre-periphery (in particular) gradients or cleavages, is much more stable. Formed by decades, it consists of regions likely living in different times. The styles of adaptation, either creating markets or adjusting passively, have widened the gaps. The prognostic horizon of Russian regional development is based on a typological approach, the more so that all 89 subjects of the Federation form an excessive number and have to be unified in groups or macrotypes, such as the largest metropolitan areas, old-industrial semiperipheries, agrarian, resource-based and border regions.

All these allows us to suggest two basic scenarios of future:

- An inertial development based on primary exports and modest import-substitution which requires state protectionism for manufacturers of selected goods (A).
- Emergence of a new Russian economy, aggressive innovative (R & D and hi-tech) activities along with and, perhaps, soon after the A scenario (B).

The A version was realised, partly involuntarily, in 1993-97 under Yeltsin and Chernomyrdin rule. The industrial output gives an example of its spatial results. General decline had been escorted by divergence which increased even in 1997, the first year of a recovery, though broken by the 1998 default. The 5 to 10-fold gap between the top producing member of the Federation and his antipode in 1960-70s decreased to 1.4 times in 1990 and grew again to a level of 2.5 times by the mid-90s. A profile across the country by major economic region gave another impression. Market restructuring in favour of mining and low-tech sectors resulted in a new eastern shift. The contribution of Siberia jumped up from 20 percent to 30 in the then prices. The old Centre headed by Moscow seeded its position to the mid-Russian *Yamal–Urals –Volga* pivot (45% of industrial outputs and exports). However, the general variation index grew up due to the losses of weaker regions, branch manufacturing zones included. After 1998, the rise of import-substitution began to shift the profile back westward, and the new tendency was only temporary interrupted in 2000, the year of very high oil prices.

Basic theoretical combinations of major global trends and local variation (often used and differently called) are shown in the scheme below. The general trend of the 90s was *regressive divergence*, but the whole picture depended on sector and scale. A decay does not exclude cases of local growth, and vice versa. Any scheme simplifies reality; nevertheless, a rejection of the 'Chernomyrdin model' was promising and giving chances for manufacturing sectors as distributed much more regularly upon Russia's territory.

Typology of general and local development trends

General (Global, National) Trend	Progress (Development,	Regress (Deterioration,
	improvement, growth, etc.)	decay, decline, etc.)
Convergence	<b>Progressive convergence</b> (Levelling	Regressive convergence (Levelling

Local	(Levelling,	up,	down,
(Regional)	equalisation, etc.)	equal growth, etc.)	equalizing decline, etc.)
Variation	Divergence	Progressive divergence	Regressive divergence
	(Differentiation,	(Unbalanced development, uneven	(Differentiating,
	segregation etc.)	growth, etc.)	uneven decline, etc.)

On the other hand the A scenario, in principle, cannot satisfy the national ambitions and mass expectations. So, we focus on the B alternative with its external and domestic preconditions. The former depend on medium-term global economic dynamics and claim an acceleration of some key hi-tech sectors and centres. The problem consists in the fact (or, at least, in our opinion) that Russia has practically lost its historical chance to enrol in the electronic-informational half-Kondratieff (1975-2000) as a producer of e-technologies and e-techniques.

This does not mean the absence of Russian R & D base in the field which was developed initially in Kurchatov Atomic energy institute since 1982 (the first Russian Internet provider since 1989) and later in other academic centres and in Zelenograd (Moscow satellite city, 'Russian Silicon Valley'). Although the crisis impeded technical progress, the progress in use of PC and global information network has been impressive since the late 90s.

Different evaluations of, say, the Internet audience are normal practice depending on indicator and method. The number of Russian users in 2001-02 varied from 4.8 to 12.5 million. The larger figure belongs to the known Irish Nua Surveys and places Russia into a top world dozen but with relatively modest 'penetration level' (8.6 percent). According to some other surveys, 36 million Russians are going to become the Internet users. The spatial dimension of Russian network is extremely irregular, 11 millionaire cities form 90 percent of its audience, with 35% in the two capitals. In Moscow, the share of those who are 16 or older and visit the Network at least once a month amounts to 15 percent.

The national fragment of the global Net is extended from Saint Petersburg and Krasnodar to Vladivostok, but provinces look much more modest in number of users and providers, web sites, host and ordinary computers. The e-commerce still is concentrated in the capital cities (19 among its 20 largest hosting providers are located Moscow and only 1 in Petersburg). At the

same time, the etechnology and economy look extremely promising for Russian peripheries with their transport remoteness, if not isolation.

In general terms, the spatial analysis of innovative activities reveals a system that includes centres of different size and specialization. Irrespective of their narrow R & D base and of the differences between market and centrally planned economies, we state that the geographical principles of the innovation diffusion process were similar. These were the types of penetration (the so called frontal or hierarchical) and of areas, according to their role in the process (creative, adaptive or conservative).

In the USSR, the system of creative centres was closely connected with the institutional structure of science, because its fundamental sector was based not so much on the universities but on the research institutions of the Academy of Science. The applied R & D facilities were organised mostly by Soviet industrial ministries many of which were comparable with the largest western transnational corporations (in physical volume of outputs). The then created backbone of both polyfunctional and monofunctional specialised centres can play its role in contemporary and future spatial economic development.

Three centres (agglomerations) of the former type are most important. They are Moscow, St. Petersburg and Novosibirsk. The next level of polyfunctional centres includes Nizhniy Novgorod, Samara, Kazan', Yekaterinburg, Chelyabinsk, Omsk, Krasnoyarsk and some other. Combinations of different innovative activities at a lower scale are typical for each of them. Vi Monofunctional centres are more individual as often corresponding to the needs of military industrial sectors. The so called 'closed' defence cities (the two Soviet categories that may coincide or not), clearly demonstrate the hierarchical scheme of innovation diffusion. These cities seldom communicated with their vicinities and formed 'negative zones of gravitation'.

For all of them, advanced marketing and business plans will play decisive role, being oriented away from the former development models in order to be involved into contemporary chains of transnational reproduction. Unfortunately, many potential western investors regard such centres as competitors and try to replace them from the scene. However, the examples of successful co-operation do exist in spacecraft and nuclear power fields.

The budget-forming primary sectors will be an important source of domestic capital which has become more mobile, both sectorally and regionally. This is reflected by creation of some vertically integrated industrial companies and holdings (such as Russian Aluminium, Lukoil and Tyumen' Oil Company) which try to restore the former long production chains and, thus, move west- and southward in order to take over manufacturing and R & D links in European Russia and in the CIS states. Quite similar tendencies are observed in food processing with its quick capital turnover and growing appetite for farms and land. Re-integration of the post-Soviet economic space has become a slogan of political and business elites, and popular topics on fragmented space, recent publications (Ruble et al., 2001) included, may look outdated.

Generally speaking, the scenario B predict a combination of three basic tendencies: (1) redistribution of Russian capital from mining to manufacturing and R & D sectors concentrated in old centres and regions; (2) maintenance of resource areas at their present level with the help of re-investment and foreign participation, (3) import-substitution at the expense of high economic interest and macroeconomic regulation. For all benefits of the scenario which claims more adequate and advanced adaptation of Russian economy to the world market, the uneven regional development will inevitably affect this development (like any other) and request much more active regional policy.

### Footnotes

<sup>&</sup>lt;sup>1</sup> Presently uprising theoretical antiglobalism may remind that of the early 1970s, when A. Emmanuel (1972) and J. Amin (1974) criticised the neo-imperialism with the help of unequal exchange and accumulation models, partly Ricardian. M.Chisholm concluded in 1990: "For all the apparent solidity of the unequal exchange thesis in providing a mechanism for the systematic transfer of wealth from the poor to rich nations, closer inspection shows it to be based on the assumption that an hour's work has the same worth irrespective of the circumstances under which that work is done. If that assumption is not accepted, the thesis fails." (Chisholm, 1990, p. 188). We believe that the different circumstances are all alive and, moreover, the same. "In an advanced economy, <...> as capital investment occurs, the resulting production facility will embody the latest technology" (ibid., p. 71).

We agree with A.Lushin and P.Oppenheimer (in Russia' Post-Communist Economy, 2001, p. 261) that Russia's vast land mass and large (150 million) and well-educated population do not make it a candidate for self-sufficiency, and the reason lies not in the globalization of markets or in its demonstration effects, but in certain deeply rooted characteristics of Russia's economy and society.

One hardly can imagine today, how low the tariffs were. A railway ticket for over 600 km Moscow – Leningrad journey remained the same during 1948-88, 11-12 roubles, while an average monthly salary rose from 60 to 240 roubles. It was at least ten times cheaper then, say an equidistant trip from Brighton to Glasgow, equivalent, in its turn, to a Moscow – Khabarovsk (near 7,000 km) flight price., In July 2001 (after many inflation shocks, but before the next price jump in January 2000), the cheapest one way railway passenger prices from East Siberian or Far Eastern centres to Moscow or another European Russian city amounted to an average local dweller's monthly income, or 3 to 4 times more than in the mid-80s. For the majority of provinces, except for the "rich" Muscovites, Samara and Surgut (Tyumen' oil fields) dwellers alone, the rest of the country has become economically much more distant.

iv Illegal re-exports of Russian fuels and metals via the Baltic seaports are the best known but not unique. Fuels legally exported to Ukraine (where the price trebled), from the neighbouring southern Russian regions grew by a factor of 6 in 1999 alone. Special high price petrol stations were established in Belgorod for the 'strangers' from Khar'kov, with glamour black markets nearby...

v Regional strategies were analysed in many publications. The G. Marchenko's (1996) types are: a) conservative-communist (basically agrarian), b) national-liberal (urbanised), c) international-liberal (gateway model), d) lobbyist (searching federal support), e) separatist (republics bargaining with Moscow), and f) paternalist-clientele model of most dependent regions. The scheme by V.Lysenko and V.Matveev (1998) deals with regional economic interests: 1) mining-exporting, opened and liberal, 2) manufacturers interested in protected domestic market but protesting against anti-inflation policy, 3) self-sufficient and partly self-isolated agrarian looking for survival, 4) some of republics with their elites playing ethnic card in order to keep their special economic regimes, 5) border regions interested in foreign trade and in search of an offshore development. Anyway, as many authors state, some largest and westernised centres, the islands of tertiary post-industrial economy in an ocean of primary and secondary economies (hyper-industrial included), depend on currency exchange rates, and the deep peripheries worry about weather and yield of potatoes. These mental gaps provide Russia's political scene with the stable spatial structure (well-known in political science) which makes almost any election regionally predictable rather than unexpected.

vi Their sectoral structures and levels depend, among other factors, on geographical position. For instance, N. Novgorod, the millionaire city located too close to Moscow, evidently cedes its position to Novosibirsk and Yekaterinburg in terms of e-developments.

vii In such cases, there will be no other way but military exports. For instance, in aircraft industries (over 50 percent of Russia's export of this kind), the eastern Russian centres which work for Chinese and Indian armies etc. feel much better than the holdings in European Russia which can produce huge civic aeroplanes but are in a deep depression due to competition of Airbus Industries

and Boeing and to their protection in the West. However, this sector still is mentioned as internationally competitive (Lushin and Oppenheimer, 2001, p. 261). The Baltic and Northern shipyards after a deep decline (to 9 percent by 1997) could compensate it and elevate the output by 2-4 times making metal-intensive bodies of vessels and oil platforms in co-operation with the western partners.