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INFRASTRUCTURAL CONDITIONS OF THE PARTICIPATION OF TRANSITIONAL ECONOMY IN GLOBALIZATION – THE CASE OF POLAND

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Until the year 1990, when the construction of market economy began, the Polish economy had been to a large extent closed as regards its ties with the external environment. Development processes occurring in Poland after the Second World War bore many signs of autarchy.

For the last ten years the Polish economy has been undergoing systemic transformation. At the same time in its external environment there have been occurring radical processes of changes defined as globalization, which is not a very precise term (Brown, 1992; Dicken 1992; Ohmae, 1995; Parker, 1998). The specificity of countries which transform their economies from the centrally planned to the market economies consists in the fact that after a few decades of relative economic autarchy they try to integrate with the rapidly changing international environment. Globalization processes are one of the main elements of those changes.

The aim of the paper is to determine whether the rate of integration of the Polish economy with the international environment keeps pace with the general rate of globalization processes in the world and to indicate the conditionings of Poland's economic integration with the world economy in the sphere of infrastructure.

The paper contains far- reaching simplifications. Being aware that globalization processes cover not only the real sphere of the world economy but the regulatory sphere as well, the considerations are limited to the former one. It is assumed that efforts aiming at liberalisation of trade and flow of direct investments, deregulatory moves, privatisation, etc. in consequence lead to changes in the real sphere (volume and structure of international trade, volume of foreign direct investment). The paper reduces globalization to two dimensions – world trade and foreign direct investments on the global scale.

One characteristic feature of the market transformation is that the Polish economy is becoming more and more open, i.e. its economic ties with foreign partners are being developed very quickly. There are many forms of co-operation with foreign countries. Two are the most important as far as Poland's participation in globalization is concerned and they deserve particular attention: foreign trade and foreign direct investment. Both of them will be analysed in the paper. The role of foreign capital as the growth factor and the country's share in international trade are the key problems not only as regards the so-called transition economies but also a wider group of countries defined as emerging nations (Contractor ed. 1998).

Poland's participation in the globalization processes is conditioned by many factors. One of the most important is underdevelopment of the infrastructure of the Polish economy. If we compare the Polish economy with well-developed market economies we can notice the infrastructural gap between them. We will try to identify and measure this infrastructural gap.

Considerations concerning the prospects for diminishing or liquidating the infrastructural gap between Poland as an example of transitional economy and well-developed market economies will be presented further on. In the last part of the paper the potential role of the state economic policy as an instrument of overcoming the infrastructural gap will be discussed.

The analysed period covers the years of transformation, starting from 1990.

1. World trade as a sign of globalization

Table 1 presents the values of world exports and imports in the last decade (the nineties of the 20th century).

The data presented in Table 1 prove that the ratio of the value of world imports in 1998 to the value of world imports in 1990 in current prices amounted to 150.3%. The ratio of the value of imports per 1 inhabitant in USD in 1998 to the value of imports per capita in 1990 amounted to 134.0%.

The relation between the value of world exports in 1998 and the value of world exports in 1990 in current prices amounted to 148.1%. The relation between the value of exports per 1 inhabitant in USD in 1998 and the value of exports per capita in 1990 amounted to 131.8%.

Table 1: World exports and imports (current prices)

Year	Imports			Exports		
	in bil. USD (current prices)	Previous year = 100 (constant prices) [a]	per capita USD	in bil. USD (current prices)	previous year = 100 (constant prices) [a]	per capita USD
1990	3556,1	104	673	3430,9	105	650
1991	3606,4	104	682	3485,6	105	660
1992	3792,2	107	692	3651,1	105	666
1993	3706,8	104	669	3632,4	105	655
1994	4236,4	110	752	4145,5	108	736
1995	5066,9	109	876	4973,9	108	861
1996	5300,1	104	919	5160,7	105	895
1997	5230,7	106	894	5168,8	108	884
1998	5346,2	105	902	5080,0	106	857

[a]The World (excluding Central and Eastern Europe and former USSR)

Source: Statistical Yearbooks of the Republic of Poland – Central Statistical Office, Warszawa

2. Poland's position in the world trade

Table 2 presents data on the role of the Polish economy in the world trade.

Table 2: Poland's gross domestic product, imports and exports (current prices)

Years	GDP		Imports			Exports			
	In mln USD[a]	Per capita in USD [a]	in mln USD	per capita in USD	in % of the world	in mln USD	per capita in USD	in % of the world	exports/GDP ratio
1990	58976	1547	9528	250	0,3	14322	376	0,4	28,6
1991	72924	1998	15522	406	0,4	14903	390	0,4	24,1
1992	84326	2198	15913	415	0,4	13187	344	0,4	18,4
1993	85853	2232	18834	490	0,5	14143	368	0,4	22,9
1994	117978	3057	21569	559	0,5	17240	447	0,4	24,0
1995	126348	3086	29050	753	0,6	22895	593	0,5	25,9
1996	134550	3484	37137	962	0,7	24440	633	0,5	24,4
1997	143066	3702	42308	1094	0,7	25751	666	0,5	25,7
1998	157274	4068	47054	1217	0,9	28229	730	0,6	25,7

[a] According to official exchange rate

Source: like in table1

The following conclusions can be derived from them:

relations between the values of GDP, imports and exports (in current prices) in 1998 and the values in 1990 amounted to 266.7%, 493.8% and 197.1% respectively. The rate of growth in the value of imports was 1.85 times bigger than the growth rate of the GDP and as much as 2.63 times bigger than the rate of growth of exports. Therefore, there existed a significant disproportion in the dynamics of the analysed magnitudes.

relations between the values of GDP, imports and exports (in current prices) per 1 inhabitant in the same period were as follows: 263.0%, 486.8% and 194.1% respectively. Disproportion in the rate of growth of those values was similar to that in the total values of GDP, imports and exports.

The comparison of data from Tables 1 and 2 makes it possible to formulate the following conclusions:

indicator of the rate of growth of the world imports in current prices in the years 1990-1998 amounted to 150.3% and that of Poland's imports – to 493.8%; thus a disproportion occurred - from the viewpoint of growth in the value of imports the Polish economy was rapidly integrating with its international environment,

indicator of the rate of growth of world exports in current prices in the years 1990-1998 amounted to 148.1% and that of Poland's exports to 197.1% - from the viewpoint of growth in the value of exports Poland's economy was integrating relatively quickly with its international environment, however, much more slowly than in the case of imports,

- participation of Poland's economy in the world imports and exports in the years 1990-1998 increased from 0.3% to 0.9% and from 0.4% to 0.6% respectively. These figures confirm the tendencies marked in the previous two points,
- value of imports per 1 inhabitant in 1998 in the world amounted to 902 USD and in Poland – to 11217 USD, whereas in exports those figures amounted to 857 USD and 730 USD respectively.

However, it would be unjustified to formulate a general conclusion about excessive import intensity of the Polish economy. The fundamental problem of the Polish economy is not excessive imports but insufficient exports. In 1998 the values of imports per capita in the Czech and Hungarian economies amounted to 2791 USD and 2543 USD respectively. For exports per capita these figures were as follows: 2561USD and 2275 USD.

3. Foreign direct investment as a sign of globalization

The data concerning inflow and outflow of foreign direct investments on the global scale in the years 1990-1998 are presented in Table 3.

Table 3: Inflow and outflow of foreign direct investments on the global scale in the years 1990-1998

Year	Developed countries		Developing countries		Central-Eastern Europe		All countries	
	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow
1990	169,8	222,5	33,7	17,8	0,30	0,04	203,8	240,3
1991	114,0	201,9	41,3	8,9	2,45	0,04	157,8	210,8
1992	114,0	181,4	50,4	21,0	3,77	0,10	168,2	202,5
1993	129,3	192,4	73,1	33,0	5,59	0,20	208,0	225,6
1994	132,8	190,9	87,0	38,6	5,89	0,55	225,7	230,1
1995	203,2	270,5	99,7	47,0	12,08	0,30	315,0	317,8
1996	211,1	320,0	135,3	58,9	12,57	1,14	359,0	380,0
1997	273,3	406,6	172,1	65,1	18,56	3,33	464,0	475,0
1998	460,5	594,6	166,2	52,6	17,39	1,95	644,1	649,1

Source: UNCTAD , World Investment Report 1999, Table I. 2, p.9 and I.3, p.20, 1996, Table I.1, p.4, 1992, Table I.1, p.14

The values of the inflow of foreign direct investment in 1998 as compared with 1990 for particular groups of countries amounted to:

- all countries –316.0%,
- developed countries –271.2%,
- developing countries – 493.2%,
- Central-Eastern Europe – 5796.7%.

The value of this indicator for the countries of Central and Eastern Europe exceeds many times its value for the remaining group of countries. Despite such a high indicator of the dynamics, the share of the inflow of foreign direct investment to Central and Eastern Europe in the total share of the inflow of foreign direct investment in 1998 amounted merely to 2.7%.

4. Polish economy and foreign direct investment

The data concerning the value of the inflow of foreign direct investment to Poland are presented in Table 4. The data show that in the first half of the nineties the volume of investment in Poland was not impressive. In recent years Poland has become a leader among the countries of Central and Eastern Europe as regards foreign investment, leaving Hungary behind.

Table 4: Yearly values of the inflow of foreign direct investment to Poland in the years 1990-1998 (in mln USD)

Year	Investment over 1 mln USD		Investment below 1 mln USD		Total investment	
	Given year	Cumulated value	Given year	Cumulated value	Given year	Cumulated value
1990	97	105	14	15	111	120
1991	219	324	30	45	249	369
1992	1084	1408	152	197	1236	1605
1993	1420	2828	199	396	1619	3224
1994	1493	4321	209	605	1702	4926
1995	2511	6832	351	956	2862	7788
1996	5196	12028	1043	1999	6239	14027
1997	5677	17705	883	2882	6560	20587
1998	10665	27770	68	2950	10063	30650

Source: (Olesinski, Pac-Pomarnacki,1998) and (Apanowicz ,1999).

The comparison of data from Table 4 and Table 3 leads to a conclusion that the indicator of the growth of value of the inflow of foreign direct investment on the global scale in the years 1990-1998 was lower (316.0%) than the same indicator for Poland (9065.8%). Such significant progress in the dynamics of inflow of FID to Poland was, above all, possible due to very low initial values at the beginning of the nineties. Poland's share in the world FID inflow in 1990 amounted to 0.05% and in 1998 to 1.56%. It should be noted that in 1998 that indicator significantly exceeded the indicators of Poland's share in the world exports and imports.

5. Globalization and external equilibrium of economies

Rapid integration of the Polish economy with the world economy is not free from threats. The basic difficulty is connected with ensuring external economic equilibrium.

Table 5 presents Poland's balance of trade turnover in the years 1990-1998.

Table 5: Commodity payments in the years 1990-1998

Specification	1990	1991	1992	1993	1994	1995	1996	1997	1998
Commodity payments in bln USD									
• Revenues from exports	10863	12760	13997	13585	16950	22878	24420	27233	30122
• Payments from exports	8249	12709	13845	15878	17786	24705	32574	38521	43842
• Balance	2214	51	512	-2293	-836	-1827	-8154	-11289	-13720

Source: Assessment of social and economic situation in 1997 along with elements of the forecast for 1998, Government Centre for Strategic Studies, Warszawa, February 1998 and Polish Foreign trade in the years 1998-1999, Foreign Trade Institute, Warszawa 1999.

Foreign trade deficit aggravating from year to year is the main factor influencing the balance of current turnover. In 1997 this deficit amounted to 4.3 bln USD which constituted 3.2% of the GDP, whereas in 1998 it

amounted to 6.9 bln USD (4.4% of the GDP). A factor which smoothed out the influence of the high deficit in trade turnover was revenues from the so-called cross-border trade which, however, were decreasing.

Negative balance in the trade turnover is generated mainly by the exchange with the European Union countries. According to customs statistics, registering the flow of commodities and not payments actually made, the deficit in turnover with the EU increased from -7.3 bln USD in 1996 to –10.5 bln USD in 1997 and to –12.9 bln USD in 1998. It should also be noted that a significant factor influencing the balance of Poland's trade turnover is the balance of foreign trade exchange of the companies with the share of foreign capital operating in Poland. In the years 1994-1998, the latter amounted to –2.8 bln USD, -3.9 bln USD, -7.4 bln USD, -10.0 bln USD and -11.6 bln USD respectively. Considerable import requirements of the firms with foreign capital result from modernisation of their production potential (investment imports) and from a high demand for supply imports (Durka, 1998).

A high and aggravating deficit in the balance of current turnover is the most serious threat for further stable economic growth of Poland. The related literature shows that countries which opened their economies and joined the then existing EEC (Spain, Portugal, Greece) also experienced considerable worsening of the current trade balance and they financed the negative balance of current account with the surplus of capital balance (Nowicki, 1997;p.68). In such a situation it is necessary to implement a proper macroeconomic policy in order to prevent overheating of the economy and inflationary tensions.

The process of integrating Poland's economy under transformation with its international environment can be summarised in several points:

- export capacity of the economy is not satisfactory as regards maintaining equilibrium of the balance of trade; despite progressive modernisation of the economy, this capacity has not increased sufficiently,
- demand for imports was not very high in itself; it is significant that the rate of imports growth was very high and the volume of imports was not adjusted to the financial capabilities of the economy,
- maladjustment of the value of exports and imports led to a considerable trade balance deficit,
- trade balance deficit was financed mainly by the means from the inflow of foreign direct investment; however, such a situation cannot be continued in the long run because of the threat of a financial crisis.

6. Infrastructural gap

As has already been mentioned in the initial part of the paper, the authors believe that one of the essential conditions for Poland's participation in globalisation processes is infrastructure. This corresponds with the view, commonly recognised in the related literature, that infrastructure plays a particular role as a factor of development of international economic and non-economic relations and at the same time as a factor of development of social and economic mega-space. It is connected with the functions fulfilled by infrastructure, above all, the function of mobility of people, products, energy and information. Infrastructural connections, mainly transport, are one of the basic determinants of globalisation (Zorska, 1998; Ratajczak, 1999).

The paper presents an analysis of the changes in the sphere of infrastructure which are a consequence and simultaneously an element of transformation. The analysis is limited to this part of the infrastructure which is most frequently referred to as economic infrastructure. The economic infrastructure comprises linear and point objects from the field of transport, communication, power industry and water economy as well as protection of the natural environment – more and more frequently included into the infrastructure.

The analyses of necessary changes in the sphere of infrastructure and its services in the countries under transformation, attention is paid to two basic aspects of the transformation (Transition 1996). The first one is a need of infrastructural development understood as increasing the infrastructural elements of the national property of particular countries. The second aspect of the necessary transformations in the sphere of infrastructure in the countries of Central and Eastern Europe refers to the principles of the functioning of infrastructural elements of economy.

The command economy was characterised by a clear tendency to restrain the development of infrastructure. The limitation of the development of infrastructure was reflected not only, and in the case of certain infrastructural elements, not so much in the quantitative indicators, but also in qualitative indicators.

The quantitative aspect of differences in the level of infrastructure between the countries under transformation and the remaining European countries is presented in the Table below. It should be underlined that although the data illustrate the state from the mid-eighties, the characteristic slow pace of changes (particularly for the linear objects of the infrastructure) causes that the data from Table 6 can be treated to a large extent as adequate for the situation of the infrastructure of European countries at the beginning of the nineties as well.

Table 6 : Synthetic indicators of the level of development of economic infrastructure in the European countries in 1984 (in points)

Countries	Indicator	Place
Luxembourg	76.1	1
Sweden	67.5	2
Switzerland	65.9	3
Norway	62.7	4
The Netherlands	57.3	5
Denmark	55.5	6
West Germany	54.7	7
Belgium	54.6	8
France	52.0	9
Great Britain	48.2	10
Austria	47.5	11
Finland	42.5	12
Italy	41.5	13
East Germany	35.1	14
Ireland	29.5	15
Spain	29.4	16
Czechoslovakia	27.6	17
Greece	25.2	18
Bulgaria	22.9	19
Poland	20.5	20
Hungary	18.6	21
USSR	17.1	22
Yugoslavia	16.8	23
Portugal	16.7	24
Romania	15.1	25
Turkey	6.8	26

Source: Author's own calculations based on national statistics and statistics of the UN and CMEA. As regards the method of calculations see: (Ratajczak,1990).

Giving general and brief characteristics of the infrastructural situation of Poland in the pre-transformation period, it should be noted that a typical feature of that period was the lack of equilibrium between the development of infrastructure and the growth of demand for its services. The implemented strategy of social and economic development was connected, on the one hand, with limitation of the outlays for infrastructure, so that many of its links were characterised by the quantitative and qualitative underdevelopment (the most neglected spheres were telecommunications, water economy along with inland water transport and protection of natural environment). On the other hand, the same solutions led to the expansion of demand for infrastructural services.

An unfavourable feature of the development of infrastructure in Poland is also the lack of complex character. This was reflected in: 1) disproportion and the lack of coherence in the development of main infrastructural sectors; 2) disequilibrium in the development of the elements of particular sectors of the infrastructure, especially in transport (e.g. giving priority to the rail transport on the one hand and underestimating the significance of inland water transport on the other hand); 3) limiting the necessary range of particular infrastructural investments. "Economical", i.e. maximally limited infrastructural undertakings were responsible for the fact the infrastructure in Poland could not meet the growing demand for services due to the lack of reserves. Another significant problem was the increasing difficulties connected with the condition and depreciation of infrastructural objects. Highly depreciated infrastructural equipment was a result of both insufficient outlays for the modernisation of infrastructure and the requirement for infrastructural services not proportional to the country's economic performance.

There is no doubt that in Poland, like in other countries under systemic transformation, a significant development of infrastructure is absolutely necessary. However, this general conclusion calls for answering a series of additional questions. The first question concerns approximate estimation of the outlays necessary for a radical improvement of the state of infrastructure. In the related literature one can find estimates of the costs of different programmes of development of particular elements of the infrastructure. For example, the programme of bringing the network of wire telephony in the former GDR to the level comparable with the West German lands (prior to unification of Germany) was to cost about 60 billion DM. Moreover, about 60 billion DM was to be spent until the end of the year 2000 on the development of the chosen ventures from transport infrastructure under the so-called programme of the German transport unification (Sandhäger, 1995). In Poland the costs of the programme to construct the basic network of motorways about 2600 km long were estimated at approximately 5-6 bln USD (Rafalski, 1997).

A much more difficult and much less precise task is to determine the joint costs of the whole programme of infrastructural improvement in the countries of Central and Eastern Europe. In this case the problems result from different interpretations of the possible range of infrastructure and from estimating the scale of necessary undertakings together with their costs. The Table below presents the results of such an analysis relating to the former European member countries of the Council for Mutual Economic Assistance (apart from the USSR). On the one hand, the calculations were based on the synthetic indicators of the level of infrastructural development in the European countries and, on the other hand, on the information that bringing the economic infrastructure from the area of the former GDR to the average FRG level before unification will require at least from 100 billion DM (variant A in Table 2) to 300 billion DM (variant B in Table 7). Being fully aware of the limitations connected with the calculation method applied, it should be noted that in the light of information on the already sustained outlays and the outlays planned for the infrastructural development of the former GDR, keeping the outlays at the level of 100 billion DM turned out to be unrealistic. Therefore, for other countries included in the Table 7 it must be assumed that the necessary outlays for the development of infrastructure exceed the sums estimated in variant A.

Table 7: Estimated volume of investment necessary to equalise the level of development of the economic infrastructure in Central and East European countries with the level of West Germany (in bln DM from 1990)

Countries	Volume of necessary investment	
	Variant A	Variant B
Bulgaria	**113**	**339**
The Czech Republic and Slovakia	**1333**	**399**
Poland	**430**	**1290**
Romania	**400**	**1200**
Hungry	**140**	**40**
Former GDR	**100**	**300**

Source: Author's own calculations based on: (Ratajczak, 1990), Le coût d'une mise au niveau Ouest-Allemande de l'économie de la RDA, Problèmes Economiques 1990, p.10.

7. Sources of financing the programmes of infrastructural development

Considerable financial requirements related to the development of infrastructure call for the formulation of another significant question: who would finance this development?

There are four basic sources of the financing of the programmes of infrastructural development: a) budgetary means, b) national private capital, c) foreign private capital, d) international institutions.

Out of the four above-mentioned sources, the most significant role should be attributed to the budgetary means, which obviously does not mean that it should be the role of a hegemon. The belief that the budgetary means are to be the main source of the financing of infrastructural development in Central and East European countries results in fact from the limitations of the other sources.

As regards the national private capital, the barriers connected with its involvement in the infrastructural development are of two kinds. The first one is scarcity of private capital, particularly the capital that could be allocated for such specific ventures as infrastructural investment. The second type of barriers refers to the nature of infrastructural investments (e.g. frequently a long return on investment) which does not particularly encourage the private owners to get involved in the infrastructural undertakings.

Another possible source of the financing of infrastructural development is foreign private capital. The specificity of infrastructural undertakings is also a limitation in this case as, apart from some exceptions, particularly in telecommunications, they are not perceived as especially interesting ones due to the relation between the risk and the so-called risk-related premium.

Finally, the last possible source to finance the development of infrastructure is the financial means obtained from international institutions. From the standpoint of Central and East European countries, particularly those which are at different stages of their attempts to be admitted to the EU, the Union's funds may play a significant role. However, a general rule is that the means from the EU funds can support undertakings which are generally in major part financed by other, above all the national, sources.

Another question connected with the necessity of infrastructural development of the countries under systemic transformation including Poland concerns the structure of the ventures undertaken. This question, above all, refers to relations between the outlays for development of the new elements of the infrastructure, particularly the most modern and at the same time the most capital- intensive ones and the means allocated for modernisation of the already existing objects.

As regards the above-mentioned, one should agree with those experts who indicated and still indicate the need to be moderate and cautious while creating the plans of constructing very modern infrastructural objects (particularly in transport) (Tendances 1996). There is a danger that in this way such infrastructure could be created which in fact would not be very important for major part of the economic entities and which, simultaneously, would involve the means that could be used for other, less prestigious but more useful modernisation of the already existing objects.

8. Policy implications

Another aspect of transformations required in the sphere of infrastructure concerns changes in the principles of the functioning of the infrastructural elements of the economy. The most significant of the postulated transformations are the changes in ownership related to privatisation and the changes in regulating mechanisms connected with deregulation (Transition, 1996).

The idea of privatisation as regards infrastructural elements of the economy is quite commonly accepted. This, however, does not mean that there are no differences in opinion as to the required range, rate and methods of privatisation. As regards the rate and range of privatising the infrastructural elements of the economy, one can come across the opinion that in the countries under transformation they should be quicker and wider than in the countries of West Europe (Major, 1991). Supporters of such a point of view indicate a much more negative in its consequences character of state ownership in the former centrally planned economies than that of state ownership in the market economies. Therefore, maintaining state ownership in the infrastructure of the economy in the countries undergoing transformation means transferring systemic solutions infected with all the weaknesses of the command economy to the new reality.

Not negating the idea of privatisation in the field of infrastructure and its services, attention should be paid to the already mentioned limited interest of private capital owners in getting involved in the sphere of infrastructure. Moreover, one should not omit arguments which call for great caution in privatisation-related activities. In this case particularly the arguments of social character and the importance of part of infrastructural services as the so-called universal services cannot be neglected.

Privatisation in the sphere of infrastructure cannot be separated from the idea of deregulation if changes in ownership are not to lead to replacing of a public monopolist or quasi-monopolist with a firm of similar character, only a private one. On the one hand, deregulation should, above all, mean lifting the institutional barriers for infrastructure and its services to enter the market and on the other hand it should mean developing new forms of regulation adjusted to the economic situation. The latter, apparently paradoxical, element of deregulation which actually means re-regulation, results from the fact that in the area of infrastructure and the related services it is difficult to expect that the so-called strong invisible hand of the market will work, i.e. all those rules which force the economic entities to operate according to the principles typical for the free market. This is why most economists agree that in the sphere of infrastructure and its services some form of regulation is necessary, although it does not give a ready answer either to the question what should be regulated and how, or who should perform the duties of the regulator.

To sum up considerations on infrastructure under systemic transformation, some basic conclusions may be formulated.

Firstly, significant differences between the command economy and the free market economy refer also to infrastructure and its services.

Secondly, it was characteristic of the command economy to create a considerable demand for the services of infrastructure on the one hand and on the other hand, to implement the policy of maximum postponing and economising on the outlays for infrastructural improvement. As a result of this, when transformation began, infrastructure in the countries of Central and Eastern Europe including Poland was decidedly insufficient from the viewpoint of the market economy requirements.

Thirdly, the two main directions of changes in the infrastructural links of the economy under transformation are quantitative and qualitative growth, which requires investment outlays and changes in the principles of functioning, covering, above all, such questions as privatisation and deregulation.

Fourthly, both in the light of previous experiences of the market economies and on the basis of effects of systemic reforms undertaken in the countries under transformation, one can state that the range of influence of the market on the sphere of infrastructure and its services cannot be equally significant as in the case of the so-called directly productive links of the economy. This generally means that even if privatisation and deregulation understood as elimination of institutional barriers are possible, they must be accompanied by certain forms of regulating the behaviours of entities which are the owners of infrastructure and which provide services when it is used.

Fifthly, the state cannot treat privatisation and deregulation as a way to free itself from the necessity to bear major responsibility for the development of infrastructure and its services because one should be aware that market self-regulation is not an equally effective solution as in the case of other economic areas.

Finally, the absence of significant changes in infrastructure may be an additional threat to Poland's position on the map of a more and more global world economy.

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