

# Contributions to the Issue of Regional Economic Growth and Equilibrium

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## SUMMARY

The geopolitical change of direction taking place after 1989 induced a number of positive and negative social and economic changes in Hungary (as in the other post-socialist countries). Among the latter changes perhaps the most depressing one is that in the past two decades economic policy has not been able to achieve a sustainable and balanced economic growth, either in the short or in the long term, or to manage the problems arising from its lack. The external and internal imbalance (at macro and mezzo levels) arising in this way is continuously generating serious tensions.

This paper attempts to find an answer to the question of what role regional policy can play in creating local and regional economic equilibrium and in starting a relative convergence.

Key words: regional policy, regional growth, regional equilibrium, regional sustainability.

Journal of Economic Literature (JEL) code: O11, R11

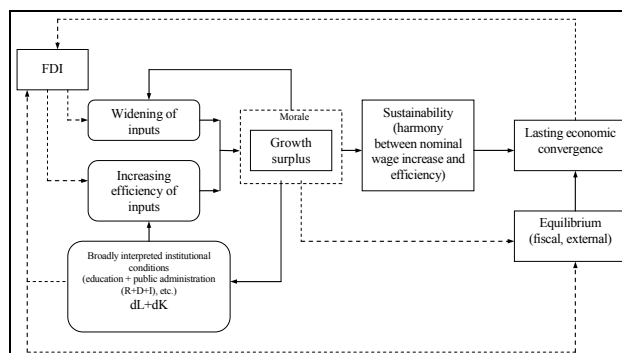
## INTRODUCTION

The economic policy of Hungary over the past decades can be described by a number of controversies. Little wonder that the final outcome is mixed: in accordance with ill-advised and whimsical improvisations (matching the election cycles) and, on the other hand, with the business cycles taking place in the world economy, the rate of Hungary's macroeconomic growth and the deviance from the equilibrium path keep changing from smaller to bigger; the sign and size of the domestic output margin keep changing cyclically while the exposure of macro- and mezzo-level outputs to external disturbances has also increased.

## CAUSES AND RESULTS OF THE DEPRESSION

Lasting economic convergence is a function of three factors: growth rate, the sustainability of the growth rate and economic equilibrium (Figure 1).

Those shaping the Hungarian economic policy have disregarded this axiom since the 1970s.



Source: author's own work

Figure 1. System of conditions of lasting convergence

The debt spiral of Hungary began at the same time as the oil price explosion of 1974. The continuous deterioration of our terms of trade and the increase in the imports price level (20% annually on average) were compensated by the government by means of continuous borrowing.

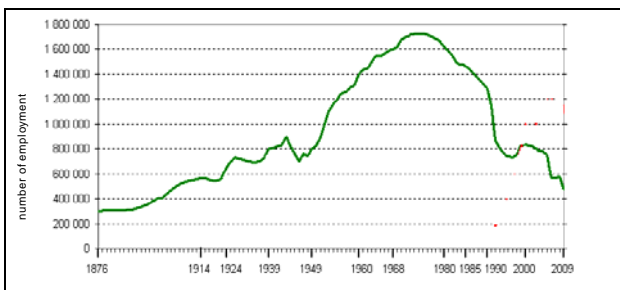
Our imbalance kept strengthening between 1985 and 1989 (while our net outstanding total debt increased from 6.5 billion USD to 14.9 billion USD, and gross outstanding total debt increased from 11 billion USD to 20.4 billion USD).

On the basis of the foregoing it can be understood that the domestic economy came to a state close to depression several times in the past decades.

The slow stabilisation of the past years has been halted by the economic policy deployed after 2002, and the outstanding total debt of Hungary began to increase again. Our position was further damaged by the financial crisis of 2008. The internal causes of our present situation, close to depression, can be attributed to the following (with some simplification).

#### a) Growth deficit, excessive desindustrialisation

The Hungarian economy has been struggling for more than three decades with the problem that the added value of our products and services is small. Since the beginning of the 1980s this has set back employment and the output growth rate in Hungary (Figure 2).



Source: author's own work

Figure 2. Development of the number of those employed in the Hungarian industry (1876-2009)

The decline of the processing industry has played a significant role in this in the past two decades. The service sector in Hungary has been unable to replace or outdo the employment or the production value of the industrial companies being closed down.

#### b) Lack of equilibrium

Thus (as shown by the above) the lack of equilibrium in the economy of Hungary is not a new phenomenon. The professional authors dealing with economic policy are debating at most the date of the acceleration of the process.

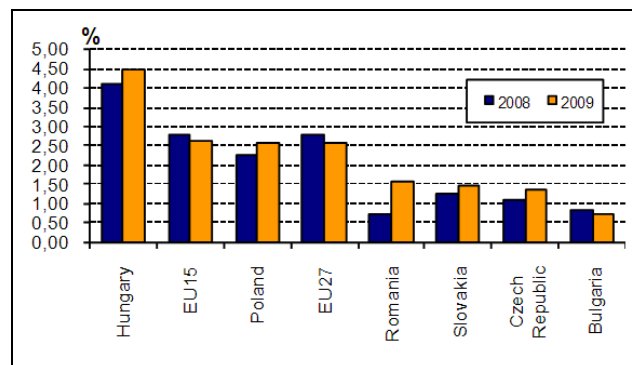
A lasting lack of equilibrium can be retraced, with some simplification, basically to three causes which are in close interaction with each other: the decreasing competitiveness and exportability of our products, the increase in consumption that has become disconnected from the economic growth rate and the unfavourable changes in exchange rates.

The lack of imbalance (in the budget and in the balance of foreign trade) thus arising has resulted in twin deficits.

#### c) Lack of sustainability

The growth path of the Hungarian economy has been hindered in addition to the errors in the economic policy of the past years by the increasing obligations in payments of interest.

The high state deficit incurs large redemption burdens, which narrows the range of possibilities for action of the budget (Figure 3). Part of the close to 1100 billion HUF that is at present used to pay interest could be spent on productive investments and other productive expenditure (health care, public education, etc.), and while leaving the expenditure unchanged, tax burdens could be considerably reduced (e.g., 7.5 times as much could be spent on housing support as in 2010, or more than twice as much could be spent on family support as in 2010, or the value added tax burden could be reduced by nearly half, or one-third of the interest expenditure could be sufficient to eliminate company tax completely, or personal income tax could be reduced by more than 40%, or the social security contributions of employers and employees could be reduced by more than one-third, thus reducing the tax wedge further and stimulating the labour market).



Source: EU Commission - AMECO

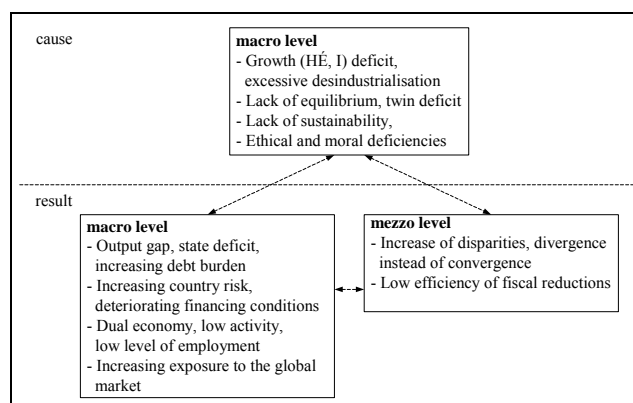
Figure 3. Interest expenditure as percentage of GDP 2008-2009

#### d) Moral affliction

The recognition that sustainable economic growth can hardly be set in motion without stable moral foundations is not a new phenomenon. The problem is not typical to Hungary, but the social and economic consequences of the deterioration of the general conditions are serious in Hungary as well.<sup>1</sup>

<sup>1</sup> In Europe more than one third of the workers of large companies asked were willing to offer cash or other presents for clinching a deal, one quarter do not trust the ethical behaviour of the company management. Hungary is the second after Russia on grounds of the occurrence of malpractice. In the framework of the survey conducted in 25 countries in Europe, more than 2300 employees were asked from workers to top executives. (For the complete survey, see <http://www.ey.com/HU/FIDS>.)

The above deficiencies result in problems at the levels of both the national economy and of regions (Figure 4).



Source: author's own work

Figure 4. Macro- and sub-national results of depression

## RESULTS OF THE DEPRESSION

In the following, regional (mezzo-level) problems will be discussed, as flowing from our topic.

Table 1. Gross domestic product (million HUF)

Year	Hungary	Regions						
		Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain
1995	5746248	2308185	568269	580095	464657	533365	631593	660084
1996	7113667	2921656	710224	729160	558437	625806	771320	797064
1997	8814578	3672887	924147	908175	672553	755408	938459	942949
1998	10453044	4337164	1121369	1127137	786839	900063	1089406	1091066
1999	11640204	4914707	1205769	1315062	888122	978850	1152614	1185080
2000	13 368 903	5749466	1409831	1486596	984178	1096006	1318453	1324373
2001	15 307 183	6753595	1580835	1578964	1110079	1258985	1559864	1464861
2002	17 231 288	7842653	1665076	1752481	1230432	1394712	1717465	1628469
2003	18 838 254	8371940	1909057	2008898	1330164	1543478	1915188	1759529
2004	20822396	9332337	2166169	2142326	1433297	1732352	2074520	1941395
2005	21970780	10149328	2264769	2157842	1468924	1809434	2125955	1994528
2006	23730035	11238468	2349996	2352278	1538333	1886009	2268181	2096770
2007	25321478	12066320	2565394	2451606	1648809	1989681	2389327	2210341
2008	26753906	12879358	2647830	2588827	1746031	2020802	2499135	2371923
2009	26054326	12915040	2457169	2409882	1693787	1907020	2402846	2268582

Source: KSH

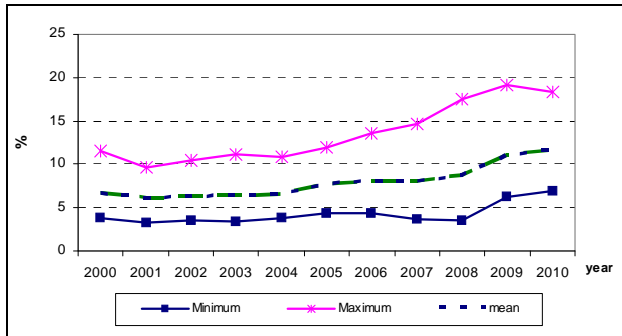
The investment and employment dynamics of the regions developed also depending on the sectoral structure of the regions (existence or lack of the driving sectors). Long-term low investment was matched by long-term low employment (although after 2009 the regional

### a) Increase in disparities, divergence instead of convergence

The transition to the market economy (1989) found the Hungarian society and economy in regionally differing situations. The real and latent regional differences are not new. In the early and mid 1980s, with the deterioration of the competitiveness of the industry, mono-structural regions came into difficult positions (a good 20 years after the processes appearing in Western Europe due to similar causes).

As is well-known, though the party and political management of the times was aware of the problems, it took no steps concerning the the situation (measures taken for the sake of keeping up appearances were formed instead).

The change of economic and geopolitical direction increased regional differences further, for the counties took advantage of the opportunities arising from the changes in room for action in different ways (due to external and internal causes).



Source: author's own work

Figure 5. Distribution by county of the unemployment rate in Hungary

As a result, in the labour market of the transformation starting after 1990, the West-East direction unemployment slope emerged in Hungary; and a more than tenfold difference came into existence between the regions with lower and with higher unemployment rates.<sup>2</sup>

The different output paths of the regions can be explained by the different personal consumption and investment as well as by the external demand.

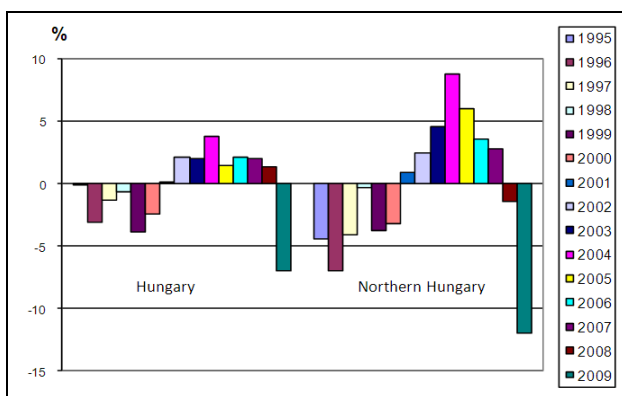
Our empirical investigations show that the volatility of regional output has been higher than the volatility of the output gap of the Hungarian macro-economy in the past years (Table 2).

Table 2. Annual changes in output gap<sup>3</sup> (%)

Year	Hungary	Regions						
		Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain
1995	-0.08	15.67	-9.57	-15.26	-8.60	-4.48	-5.58	-6.61
1996	-3.09	3.97	-9.17	-12.20	-7.38	-7.04	-4.78	-4.19
1997	-1.29	1.34	-1.21	-6.99	-3.58	-4.14	-1.34	-1.47
1998	-0.63	-2.29	2.98	0.43	-0.66	-0.31	-0.27	0.83
1999	-3.87	-6.45	-2.96	3.69	0.17	-3.82	-6.56	-1.83
2000	-2.41	-5.25	0.99	5.12	0.31	-3.22	-4.09	-0.59
2001	0.12	-1.87	2.02	1.21	3.19	0.94	2.91	0.51
2002	2.09	1.89	-2.23	2.73	5.14	2.39	3.65	2.91
2003	2.01	-1.64	2.83	8.48	5.16	4.50	6.51	3.04
2004	3.82	0.07	7.76	7.24	5.43	8.83	6.97	5.93
2005	1.50	0.09	4.67	0.66	1.03	6.03	2.19	1.88
2006	2.13	2.59	1.42	2.74	-0.66	3.55	2.10	0.67
2007	2.00	2.52	3.83	0.66	0.35	2.76	1.13	0.11
2008	1.28	2.35	0.90	0.29	0.48	-1.48	-0.19	1.67
2009	-6.96	-3.61	-11.54	-11.64	-7.56	-11.95	-9.16	-7.71

Source: author's own calculations based on KSH data

Net exports are primarily responsible for the short-term fluctuation in output (Figure 6).



Source: author's own work based on KSH data

Figure 6. Output gap path

This means that the government measures limiting or expanding consumption have a smaller effect on the incomes of the population than the effect of monetary policy affecting net exports (assuming unchanged demand). And changes in net exports depend on the economic structure of the given region (to a considerable extent on the cyclical positions of the multinational companies established in the region).

#### b) Low efficiency of fiscal moves

The EU funding appearing in the Hungarian budget (1999: 3.3 billion HUF; 2010: 706.8 billion HUF, data at current price) and expenditure (1999: 14.9 billion HUF; 2010: 804.8 billion HUF, data at current price) increased dynamically between 1999 and 2010. Although the time period is relatively short (therefore it

<sup>2</sup> The number of those employed in January 2011 – in the age group 15-74 – was 3 million 743 thousand, which exceeded the figure for the previous year by 0.5 % (KSH, 2011). The number of unemployed aged 15-74 was 487 thousand, 8 thousand more than a year previously. The unemployment rate of 11.5 % was basically identical to that of the previous year (male unemployment rate of 12.0 %, and female unemployment rate of 10.9 %).

<sup>3</sup> The literature offers several definitions for output gap; e.g.: P. Kiss/Vadas (2005). Our data use the results of calculations based on the actual and potential GDP ( $GDP_{pot} - G_{iényl4} / GDP_{iényl4} \times 100$ )

is hardly possible to draw strong conclusions), it can be clearly seen that the impact of the support arriving in Hungary on increases in the GDP lags behind that of the EU average (Table 3).<sup>4</sup>

*Table 3. Impact of support on increasing the GDP*

Country	GDP/EU* support	Contribution to increasing the GDP (%)		
		1989-1993	1994-1999	2000-2006
Portugal**	~ 3 %	3.9	4.6	6.1
Spain**	~ 1.5 %	2.9	3.1	4.2
Greece**	~ 2.6 %	4.3	5.6	6.1
Ireland**	~ 2.8 %	n.d.	8.9	8.6
Hungary***	~ 2.1 %	–	–	1.2

Notes: \* AGENDA 2000 (max. 4 %)

\*\* The Role of Fiscal Transfers for Regional Economic Convergence in Europe (No.1029.2009.)

\*\*\* between 2004-2006 (Source: author's own calculations)

This has several causes, such as:

- 'brainstorming' in the course of the allocation of funds;
- the majority of funding (60-65%) had the impact of increasing one-time demand or improving the community infrastructure and not of improving the economic potential, and within that there was a high rate of 'soft' projects. By contrast, the fundamental objective of the EU cohesion policy is to enable the regions with a low performance to converge. From this it follows that support is efficient when it generates additional output (compared to the situation without support).

Empirical investigations and analyses prove also in this respect that there are considerable differences (besides positive examples, low absorption efficiency is not rare);

- granting of funds took place on the grounds of political interests, significant portions were not used for investments supporting long-term convergence, and thus their impacts are also weak;
- funds are not additive, but have a substitution character. In the majority of cases they appeared not as additional funds but were substituted for former private or government investments (Kocziszky, 2010).

Our lagging and depressed regions were caught in a trap, for the efficiency of the fiscal moves of the past years (partly due to their soft nature and partly to their level being under the sensitivity threshold) was low, and the injections of capital proved insufficient to generate real convergence (that would have required a much stronger fiscal impetus).<sup>5</sup>

Beyond the macro- and mezzo-economic conditions of the real and nominal convergence of the regions in Hungary, the past years were lacking in sectoral and local economic policy harmony as well as in the underlying moral background. Part of the programmes had a virtual impact and the supports were used for 'political show schemes'.

An economic policy using a variety of fiscal and monetary instruments exclusively is insufficient for the management of regional problems, for the various shocks affect the counties to different extents.

<sup>4</sup> Under the I. National Development Plan in 2004-06 Hungary had close to 700 billion HUF at its disposal including national co-financing from the structural funds of the European Union, and the funds provided for the realisation of about 20 thousand projects in Hungary. Hungary was able to use almost all – 99 % – of the said EU funding in the period examined, however, the results is worsened by the fact that the beneficial financial performance incurred excess expenditure from the Hungarian budget of approximately 35 billion HUF. Among the reasons the national Auditing Office highlighted deficiencies in the harmonisation of the major national economic objectives, changes in certain objectives and the fact that while the institutions providing the support concentrated on the as complete as possible use of the funds, they did not pay appropriate attention to their efficiency (due to non-performance of winning projects it was necessary to have reserve developments, which cost more for their rapid production; there were also examples where developments already began had to be funded completely from national means due to suspicions about mismanagement).

The convergence of Hungary to the EU average is not progressing as we would have liked it to: the per capita gross domestic product increased only one per cent between 2004 and 2009 as a result of EU funding. At regional level the picture is even more disillusioning: while the more developed region of Central Hungary developed considerably, the positions of the six convergence regions did not change significantly, what's more Northern Hungary, Northern and Southern Great Plain, and Southern Transdanubia entered the group of the twenty poorest regions of the EU.

Examining the environmental, healthcare and certain education investments as well as regional development, it was found that we were coming closer to the EU development level, however, in the short term they did not result in economic growth. The situation was further complicated by the size of the funds and the compartmentalisation of their use, which resulted in the fact that we were only able to achieve partial results even in the realisation of the nicely sounding objectives. It can also be seen that while unemployment was soaring, in the development programs the effect of retaining jobs prevailed. In trainings promoting finding employment, approximately half of those completing the training and only 10 % of the disadvantaged found jobs. (ÁSZ, 2011).

<sup>5</sup> There are no significant changes in the leading pack or in the lower third of the human development index (compared to 2000). According to the figures for 2009, the positions of Budapest (0.8739) Győr-Moson-Sopron county (0.687) and Fejér county (0.669) are the same, while those of Nógrád county (0.600) and Szabolcs-Szatmár-Bereg county (0.587) deteriorated further somewhat.

## DESIRABLE DIRECTIONS OF A PARADIGM CHANGE

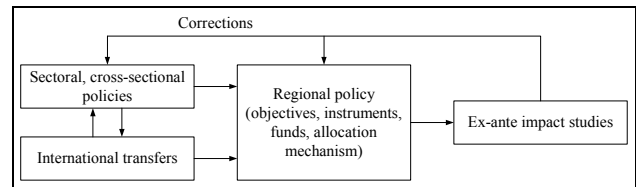
The mainstream of economic policy has been obsessed with growth in the past three decades and this view was mostly adopted by the authors of studies on regional growth and convergence as well. Today, however, it is more and more recognised that economic growth (even in such export-driven economies as Hungary) can be primarily achieved by an increase in productivity and added value and not by obtaining an increasing share of the global markets.<sup>6</sup>

The makers of the Hungarian economic and regional policy are facing a task that is not slight: they have to reduce low employment and deal with the lack in output arising from the deficit of added value simultaneously. This, however, requires a change of paradigm in regional policy.

Hungarian regional policy re-visited has to meet several requirements at the same time.

Condition 1: it has to be integrative, that is it has to arrange the elements of sectoral policies referring to regions in a multiplicative way along realistic objectives and funds; it has to meet top-down and bottom-up planning principles simultaneously.

Constructing regional policy is not independent of the objectives, instruments, resources of the sectoral and other cross-sectional policies (budgetary and monetary) or of the national economy-level allocation and re-allocation mechanisms.



Source: author's own work

Figure 7. Logical process of constructing regional policy

Condition 2: sustainable and realistic regional growth objectives have to be set.

The objectives for a given region have to achieve improvements in economic growth and employment simultaneously.<sup>7</sup> That is why the empirical literature on convergence devotes more and more attention to conditional (relative) convergence (Barro and Sala-i-Martin, 1992; Romer, 1986), that is instead of 'catching up', it is increasingly the lasting growth rate that is determined by the own equilibrium path that comes to the foreground.

Creating the state of equilibrium at a lower level uses the empirical experience that in peripheral regions the likelihood of producing a high added value is lower due to the lower human potential index; therefore, increasing employment should be put in the foreground. This can increase the income of the population even in the short term, and local consumption can be increased without raising inflation.

Condition 3: expected consequences of regional policy are to be supported by ex-ante impact studies; its system of indicators and its methodology have to be elaborated.

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<sup>6</sup> Economic widening is determined by the fight for a share that can be obtained in the global markets of processed goods. Economies showing external surpluses are generally declared to be 'competitive', taking no account of the development of their economic growth or productivity. Trade balance is regarded as the major index of a country, as if it were only a company. In reality, however, the two have hardly anything to do with each other. Trade balance means simply the difference between investments and domestic savings, or in a more general sense, the difference between aggregate expenditure and total output.

<sup>7</sup> This will probably be a prolonged process without the domestic industry (particularly the processing industry). It must not be forgotten that the high-tech (nano-, bio, etc.) sectors produce high added value, have a low employment capacity and are located in highly concentrated areas even in the developed countries.