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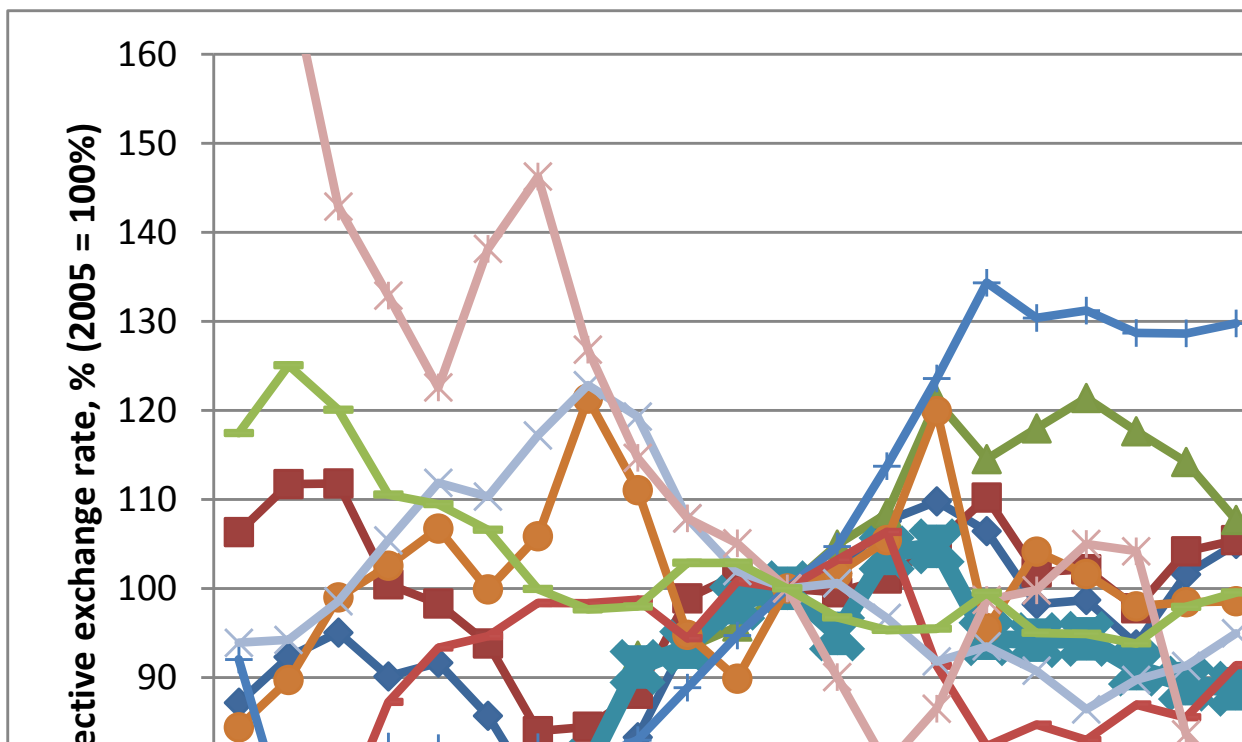
Supporting innovation: the issues of creating a knowledge-driven economy in Hungary

Economic and financial prerequisites are now given for the Hungarian economy to be placed on an innovation-driven development path: the country had managed to secure cost-efficiency for several years, while in the current EU fiscal period several resources have become available for remedying potential system deficiencies. In order to offset the low rate of corporate R&D spending the Government is to allocate 60 percent of EU funds for economic development, while the amount earmarked for supporting cooperation between enterprises and research centres is the highest ever, reaching some EUR 300 million. Hungary has managed to make progress in terms of innovation performance, but creating a more balanced R&D financing structure is vital for the healthy operation of the innovation ecosystem, a basic determinant of overall economic performance.

So-called factor-costs (costs of labour and capital) are essential for any economy all over the world as these determine competitiveness on international markets. Parallel to the improvement of social welfare, these factor costs also tend to rise, therefore low-cost-based competitiveness cannot be maintained in the long term. Economies at this stage of development must aim to specialize in certain sectors of success that define their own costs and reformulate the old cost-competitiveness doctrine, turning it into a new model of “innovation cost-competitiveness.” In other words, countries at this stage must spot those technologies or industrial sectors that can become successful through excellence instead of only low costs.

Real effective exchange rate is an indicator that gauges the cost-competitiveness of a given economy compared to a basket of developed countries and a base level (here: 2005). This indicator can show not only cost-competitiveness changes due to exchange rate fluctuations, but it also takes cost and price trends into account. This is the reason for the marked differences this indicator displays among Euro-zone members. The study compares 37 countries, some of them from outside the European Union.

Fig1: The real-effective exchange rate of certain OECD countries, compared to a competitiveness basket (2015)



Source: Eurostat (2015), code: tsdec330

(Note: the lower the figure the higher the cost-competitiveness level.)

The following can be concluded in light of changes in competitiveness:

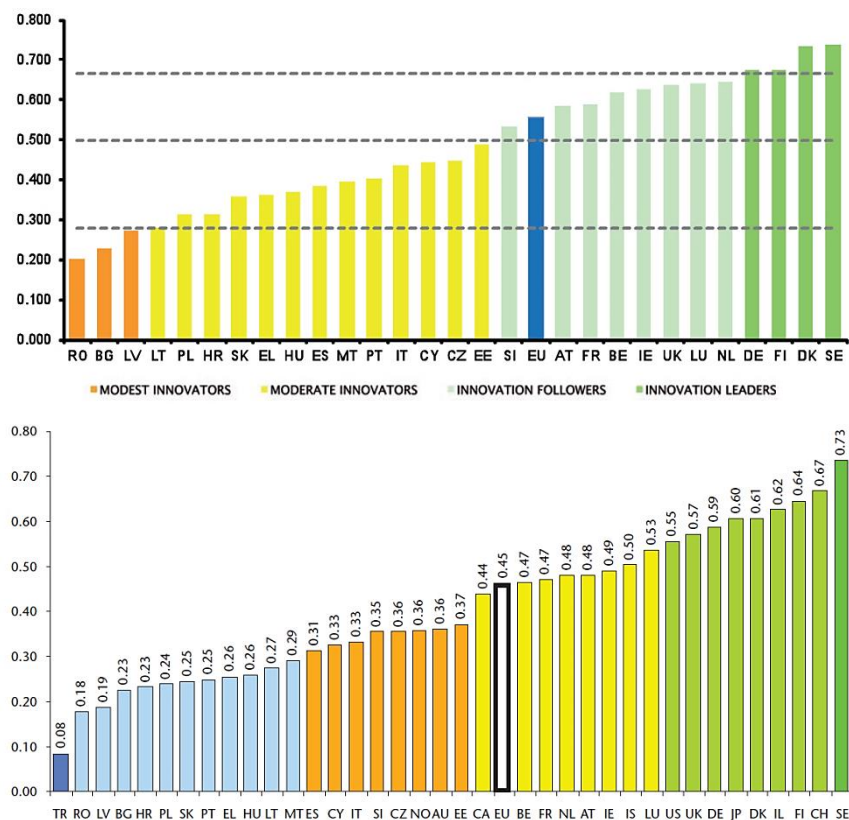
- The cost-competitiveness of the Euro-zone had improved significantly following the introduction of the common currency; since then it has stagnated at a slightly lower level.
- Innovation-driven economies such as Japan's have only recently become capable of tackling initial monetary insecurity and wage pressures. The high level of innovation has been one of the reasons for this process.
- While the United States of America could permanently maintain cost-competitiveness over the last few years, the same cannot be stated for Europe.
- Germany has been the largest winner of the introduction of the Euro, as the country has managed to reduce cost-competitiveness to below 100 percent by 2005 in comparison to

the 1994 level of 117 percent. Meanwhile, the competitiveness of several Euro-zone member states has deteriorated.

- Among the Visegrád Four, economic production has become more expensive only in the Czech Republic, the economic growth of which had soared only in the second half of the 2000s, but compared to former peaks costs have already been reduced.
- Hungary – similarly to the other Visegrád Four members – is a cost-competitive country; this factor is currently the key driving engine of Central European economies.

An optimal economic structure must therefore be cost-competitive and innovative at the same time. In light of cost-competitiveness scores achieved over the past ten years and Innovation Union Scoreboard rankings, countries can be divided into the following four main categories. **It is noteworthy that Hungary has managed to advance from the group of modest innovators to that of moderate innovators.**

Fig2: Innovation Union Scoreboard 2014 (top) és 2007 (bottom)



Source: EC, 2015 and 2007



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The following table has been based on the scores of the Innovation Union Scoreboard’s latest ranking, and a country’s relative performance in terms of cost-competitiveness, compared to 2005. Cost-competitiveness is a relative category: countries are ranked on the basis of relative performance change since 2005. Thus, a country faring worse in cost-competitiveness compared to 2005 can still be competitive.

- Fig3: Categories of EU member states according to relative changes in cost-competitiveness and the latest innovation performance (2015)

Tail-enders (non-cost-competitive with modest or low innovation level)	Laggards (cost-competitive with modest or low innovation level)	Highly developed (non-cost-competitive with high innovation level/leading innovation performance)	Stars (cost-competitive with high innovation level/leading innovation performance)
Romania	Poland	Slovenia	Ireland
Bulgaria	Greece	EU28	United Kingdom
Latvia	Hungary	Austria	Germany
Lithuania	Spain	France	
Croatia	Portugal	Belgium	
Slovakia		Luxembourg	
Italy		Netherlands	
Czech Republic		Finland	
Estonia		Denmark	
		Sweden	

Source: Compiled by the Ministry for National Economy (2015)

These categories do not represent homogenous groups. With regard to tail-enders, there is a huge difference between, for example, Romania and Estonia. The table rather shows main development tendencies between which dividing lines are thin, allowing countries easy passage from one category into another. “Easy passage”, however, only applies to cost-competitiveness, as it is much harder to achieve good ranking on innovation performance indexes.¹

Based on the above categorization it is clear that Hungary had to adopt a viable albeit challenging economic policy with highly ambitious goals: the country can improve competitiveness through innovation without compromising cost-competitiveness.

Several inputs are required to reach this objective:

1. Increasing of private sector R&D spending (in terms of BERD indicator: to reach 1.2 percent);

¹ Albeit to various extents, but every member state has managed to advance on the Innovation Union Scoreboard, therefore a comparison on similar base figures would not be relevant.

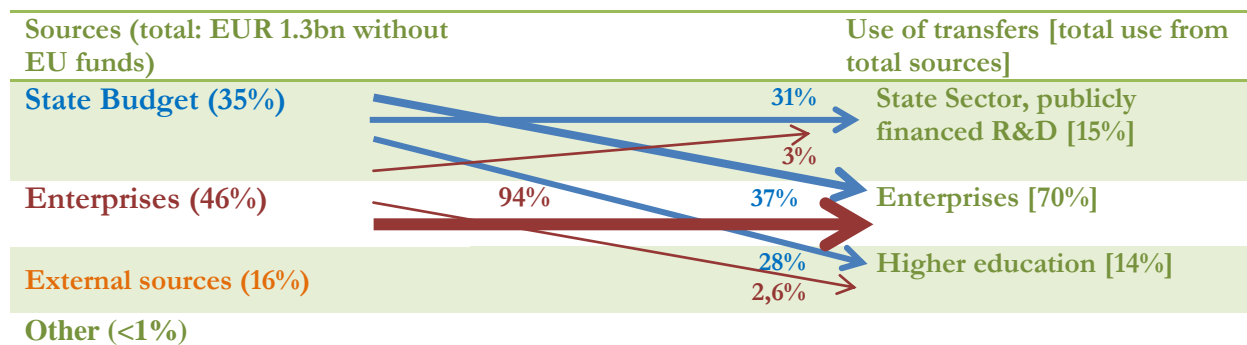


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2. Increasing of R&D spending within the national economy (GERD indicator: to reach 1.8 percent);
3. Identifying priority areas within which innovation funding has domestic multiplier effects;
4. Connecting of innovation system actors.

In comparison to the Economic Development Operative Programme (EDOP) of the former EU fiscal period, the word “Innovation” has been added to the current programme (EDIOP), which also serves as a message indicating a campaign for higher private sector innovation. One key element of this may be the optimizing of supply-demand through supporting smaller projects (i.e.: innovation vouchers and intellectual property rights). A more balanced composition of R&D funds and use of R&D transfers may be even more significant.²

Fig4: Flow of funding for R&D purposes, by sectors (2013)



Source: Hungarian Central Statistical Office (KSH, 2014)

The largest share of state R&D funding is channelled to the private sector, while private sector spending on the utilization of state research capacities is hardly visible. Under EDIOP, the largest amounts have been allocated for improving these imbalances: over the next two years, some EUR 80 million will be disbursed for various forms of knowledge and technology transfers, while EUR 300 million – the highest amount ever – will be provided for R&D&I cooperation projects.³ R&D funds have already been earmarked in this year’s national budget as the Government aims to do everything in its power to help Hungary rise from the group of laggards to that of highly developed.

² It has to be noted that Ireland is the only country where the share of external R&D funds is similar to Hungary’s.

³ Including the resources of the National Research, Development and Innovation Fund.