



The Economy in the Medium-term

Part 1

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The report is based on the AIECE institutes medium-term forecasts and comments. The detailed answers and tables can be found in the Annex. We would like to thank all the member institutes that provided us with their medium term forecasts and comments.

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I. The economy in the medium-term

1. Medium-term outlook and policy assumptions

According to the answers received from member institutes, the medium-term forecast for the European economies are better than the short-term outlook, which is heavily affected by the aftermath of the financial crisis and the current economic downturn in most industrialised countries. The forecasts of the member institutes are based on the assumptions of world economic growth and trade picking up from 2010 or 2011. Following the slump in economic activity in 2009 and the slow beginning of the recovery in 2010, the institutes expect a positive development in the medium-term forecast period 2011-2013. Real GDP growth rates of the participating institutes' forecasts range from 1 percent (Italy) to 4 percent (Czech Republic, Poland) in the period 2011-2013 and 5.6 percent in Ireland (2011-2015).

In France and Italy the economies are expected to continue to grow only moderately in the medium-run. In France, GDP growth will stay below its potential level due to deleverage process across the world. Similarly, the Italian economy is expected to reduce very slowly the negative output gap achieved in the course of this recession, because world trade is expected to grow only slowly. The medium term outlook of the UK is more optimistic, it is assumed that the banking crisis will ease over in the next three years. Once the UK economy has passed the recession and slow growth of the next few years, it is expected that the UK economy will move to a period of relatively rapid growth.

In the Swiss economy the medium-term prospects are expected to remain good, as the competitiveness of the Swiss economy is still strong. Anyhow, lower output growth of the financial sector will dampen the economy for some years. The less glamorous long-term prospects for the financial sector will be outweighed by the positive effect of an increased European integration of the Swiss economy. In Austria, a tax reform and two fiscal stimulus programmes are expected to stimulate private consumption and construction over the next years, thereby mitigating the impact of the global economic crisis on the domestic economy. Norway and Sweden see relative rapid growth rates in the medium-run, too.

The Czech, Polish and Slovenian economies are expected to experience a quicker recovery and stronger medium-term growth rates compared to the other European countries. The development of the Czech economy is assumed well with the ongoing catch-up process to the most developed EU countries. The main features of the medium-term forecasts are the good economic performance (measured with GDP growth), stable price development (especially due to high labour productivity and stable commodity prices) and relatively stable development of public and current deficits. Regarding Poland, the assumed recovery in the EU is expected to boost foreign trade in the medium-run, which determines the main pillar of medium-term growth. The main driving forces of Slovenian medium-term growth are the R&D activities already started in the period 2007-2010. They are – together with EU and national stimulating measures – expected to strengthen the international competitiveness.

The recovery of investment can be predicted in the period from mid-2010 to mid-2011, while domestic consumption will be some sort of a shock-absorber in this period.

Ireland expects a quick recovery of its economy, too. After the deep fall in GDP in 2009, the economy is expected to grow again with 5.6 percent in the period 2011-2015.

At present it is difficult to describe Hungary's medium-term economic prospects. At the moment short-term crisis management is on the agenda, and its results will determine to a large extent the medium-term prospective. But the objective of the austerity measures and structural reforms are expected to lift Hungary's trend growth rate.

Monetary policy in the Euro-zone is expected to be expansionary in the short-run. With the assumed rebound in 2010 or 2011, the ECB is expected to start raising its refinancing rates again. Regarding monetary policy of national banks in other participating institutes, a similar picture can be drawn. The current expansionary monetary policy will not turn into a neutral behaviour until the economy returns to potential growth.

Due to the global economic downswing, short-run fiscal policy is considered to be expansionary in most countries of the participating institutes, leading the public deficit to increase. Only Ireland and Italy report a contractionary fiscal policy. Over the longer term for all participating institutes the situation is considered to be too uncertain to make a certain forecast on fiscal and budgetary assumptions. Generally, fiscal policy is assumed to be neutral if economic activity picks up again.

2. Main medium-term risks and uncertainties

All forecasts of the participating institutes are based on the assumptions that world economic growth and trade are picking up from 2010 or 2011 at the latest. Especially for small and open economies the international demand is very important in their forecasts. Therefore, most answers of the participating institutes concerning the main medium-term risks and uncertainties cover the world economic development, the deepness and lasting of the present crisis. The main risk covers the financial sector; if the plans to adjust bank's balance sheets and their net asset position do not succeed, a longer worldwide recession is expected. Thus, the extent of the impact of the financial crisis on the real economy is still not predicable.

Despite of the current low inflation rate in the EU, member institutes mention inflationary pressure to be a risk in the medium-term. Prices of crude oil and other commodities may rise in the medium-term again, leading to higher inflation rates. Additionally, some country-specific risks are mentioned as well.

Concerning the economy of Norway, a lower oil price than expected may lead to lower investments in the petroleum sector. Besides the more expansionary fiscal policy, the relatively good performance in the petroleum industry is mentioned as one reason why the Norwegian economy is expected to perform somewhat better than OECD the current and the next two years.

For the Swiss economy there is mentioned the risk that in the case of a long-lasting recession, cantons and municipalities may reduce their expenses in order to meet the dropped taxed revenues. Furthermore, larger and widespread lay-offs cause additional downward risks.

Concerning Hungary and Poland, long-lasting speculative attracts on their currency are reported to constitute a risk in the medium-run. A depreciation of the Hungarian forint against the Euro may threaten the stability of the financial system due to the huge volume of the loans of households and businesses denominated in foreign currency. Uncertainties regarding the economic situation in both countries may also lead to outflows of capital (both in the short- and the long-run).

A more rapid than assumed decline in the housing market is a downside risk to GDP growth in the UK. Furthermore, with the UK authorities engaging in quantitative easing, there is now a policy-related upside risk to the countries inflation projections. GDP growth over the past decade has enjoyed a robust contribution from net inward migration. There is a major uncertainty about the future path of net inward migration. A significantly weaker profile than has been assumed by official projections would lead to a downward revision to the rate of trend growth in the UK.

II. Methods of medium-term forecasting

This section gives a short overview of the basic methodology of medium-term forecasting used by the member institutes¹. Moreover, the differences between calculating short- and medium-term forecasts are pointed out. The following table shows the time horizon of short- and medium-term forecasts of the participating institutes. Short-term forecasting covers the time period of 2 or 3 years, where the medium-term forecast horizon ranges among the institutes between 3 and 11 years.

The framework to forecast the short- and medium-term horizon differs in most of the participating institutes. The medium-term forecasts are in most cases model based (usually a supply side analysis) where in the short-term also an iterative-analytical approach (based on the national accounting framework to achieve consistency) is used. The majority of institutes use a model based approach (vector error correction model, demand side analysis).

Four out of 14 institutes use an international model (*NiGEM* or *OXFORD*) either as baseline or to calculate different scenarios in the forecasting process. The other institutes reported to use either their own model to forecast the variables of the international economy (including interest rates, exchange rates, foreign demand and import prices) or consider them as exogenous by using estimates from international organisations (e.g. OECD).

¹ For a more comprehensive view on this topic see Gern, J., Schmidt, T., Schröder, M., "*Mittelfristige gesamtwirtschaftliche Prognosen*", 2008 WILEY-VCH Verlag GmbH&Co KGaA, Weinheim and the Presentation at the Meeting of the AIECE Working Group on Longer-Term Prospects and Structural Change in Helsinki, 11 May 2007.

Country	Institute	Short-term forecast Years	Medium-term forecast Years
Austria	WIFO	Current and up to 2 following years	3-5
Czech Republic	CCS & F	2	3-5
Denmark	DEC	3	5-10
France	COE	18 months	5
Hungary	GKI	Current and next year	3
Ireland	ESRI	Current and next year	7
Italy	Prometeia	3	5
The Netherlands	CPB	2	4
Norway	SN		3-4
Poland	IBRKK	Current and up to 2 following years	5
Sweden	NIER	2	11
Switzerland	KOF	Current and next year	3-4
United Kingdom	NIESR	2	4

Nine out of 13 institutes calculate potential output estimates in the course of their medium-term forecast. The concept is used to determine a kind of benchmark growth rate for the medium-term horizon. The next session covers the determination of potential output in the member institutes' countries.

III. Potential output analysis

1. Potential output

Seven out of ten institutes use the production function approach to determine potential output². The others use a filter method (Kalman or HP-filter). Using the production function approach, the institutes assess structural productivity growth (or in more detail, structural labour productivity growth) as the main determinants for potential output growth.

Usually, in the medium-term most institutes expect their economy to grow in line with their assessment of potential output. Thus, output gap closes, or at least narrows over the forecast horizon, which is a result from the used model. However, in the current medium-term outlook there are reported to be some 'speed limits'. Section VI will take a closer look at the consequences of the financial crisis of potential output.

Six out of eight institutes calculating potential output expect its growth rate to decelerate or stagnate in the medium-term. While in the Czech Republic both, trend capital and structural productivity are expected increase less compared to the previous period (2003-2008), in Italy and Ireland the slower increase of trend capital and trend labour input affect potential output growth. In the case of Sweden and the Netherlands only the trend labour input are forecasted to increase at a slower pace compared to the previous period. Only in France, an

² For a more detailed presentation of the methodology calculating potential output see e.g. the AIECE medium-term report 2001 and 2002.

acceleration of both, structural productivity growth and trend capital input is expected to boost potential output growth in the forecast period 2008-2013.

2. Recent policy changes affecting trend labour input and structural productivity growth

The trend labour input can be defined as the level of employment consistent with a stable, non-acceleration (wage) inflation (*NAIRU/NAWRU*). Six out of ten institutes calculating potential output explicitly measure *NAIRU/NAWRU* or another definition of structural unemployment in their model. The methods used are varying; among them are the HP-filter and a Phillips-curve estimation reported. In the following recent policy changes affecting structural unemployment and labour participation rates in the participating institutes' countries are summarised.

In Poland, the reduction of tax wedge in labour costs and the training and retraining of unemployed adults are expected to affect the structural unemployment in a positive way. Additionally, the elimination of early retirement schemes for majority of employees, which was legally introduced in the end of 2008, may affect the labour participation rate in Poland.

In Denmark in 2008, 2009 and 2010 labour income taxes are reduced – which are expected to increase the labour force participation rates. This effect is however only limited (less than 1 percent increase in the labour force). From 2019 the official retirement age will be increased by at least 2 years (from currently 65 to 67 years). Further ahead, an indexation rule will lead to additional increases if the longevity is increased (as expected).

In Sweden a tax reduction for income is planned, too.

In Switzerland an increased effort to coordinate information from health care, unemployment agencies and the disability insurance has been made in order to detect upcoming individual unemployment at an earlier stage. The ongoing harmonisation of school system and day-care facilities connected to kindergardens and schools may increase the participation rate.

In the UK the government is continuing with its scheme of welfare reforms intended to engage the inactive with the labour market.

In Hungary, expansive fiscal policy measures based on EU transfers in the framework of the National Development Plan are expected to give a positive medium-run stimulus on the labour market.

A different picture can be drawn for Ireland, where the tightening of fiscal policy is expected to add a number of percentage points to the unemployment rate. A significant number of those losing their jobs will face problems in the recovery phase due to their low human capital.

Structural (labour) productivity growth is usually measured as a filter on the actual (labour) productivity or on the Solow residual. Recent policy changes affecting structural productivity growth comprise R&D policies (Slovenia and Ireland) and increased means for universities and public research centres (Switzerland).

IV. Consequences of the financial crisis

1. Consequences of the financial crisis on potential output

All participating institutes expect negative medium-term effects of the financial crisis on potential output. All three production factors constituting potential output (trend capital input, trend labour input, and structural productivity) are expected to be affected in a negative way. Following the reporting institutes' answers, the main link between the crisis and potential output goes via the investment channel. While in the short-run, potential output is suddenly negatively affected by the reduced investments in the course of the recession, in the medium-run potential output is expected to be damped by the increased risk premium, too. A higher risk premium increases the user costs of capital and therefore affects the investment decisions. Additionally, the sharp downturn of world trade, protectionistic tendencies and public support of enterprises (that would have gone bankrupt otherwise) is expected to lead to a lower growth rate of structural productivity (a kind of global Japanese 1990-scenario), too. Regarding the medium-run labour market developments, higher cyclical unemployment triggered by the recession may become structural and reduces trend labour input (*Hysteresis*). The increased government deficits may lead to a rise in the tax burden in the medium-term with a negative impact on potential labour input through the *NAIRU*, too.

There are reported to be some country specific effects as well: In Ireland, the huge borrowing undertaken to sort out the crisis has massively increased the risk premium. This is expected to reduce the optimal capital stock and hence the optimal potential output. The taxes levied to pay the increased interest will impose significant deadweight costs which will, in turn, affect potential output.

In the UK, a permanent rise in risk premia will lower potential output, too. A further impact comes from adjustments to the rate of net inward migration, and in particular migrants of working age. Net inward migration has provided a significant boost to the potential rate of GDP growth in the UK. This will probably tail off over the coming years. This is combination to a smaller contribution from the financial intermediation sector should lead to a lower potential rate of growth³.

Lower output growth of the financial sector will dampen potential output of the economy of Switzerland for some years, too.

In the Czech Republic, the failing down of some important producers in the course of the recession may reduce in structural changes in the supply side.

³ However, the UK considers the oil price development to be an offsetting factor. The fall-back in oil prices is expected to increase potential output. Calculations by NIESR suggest that risk premia will gradually ease back over the next three years, with the net effect of oil prices and risk premia reducing trend GDP by around 2 percent. Overall potential GDP is expected to be around 4 percent lower by 2018, including the outlook of the financial intermediate sector.

In Poland, the capital outflow and the induced currency depreciation may lead to an increase in uncertainty, which in turn may increase the risk premium. The released fall in investment may result in capital input declines and productivity deceleration.

If global growth in the past has been doped by an excess of debt (households and non financial corporations), medium-term growth will be lower by the necessity to reduce the debt burden. In the same way, if potential output was overestimated in the past and driven by bubbles in certain countries, an adjustment process may follow. It means that what was interpreted as an increase of potential growth in recent past was partly linked to financial bubble (e.g. higher revenues of financial corporation was partly based on the development of what is named now as toxic assets), or bubbles on the housing market. An overestimation in this sense was reported to took place in the US, UK, Ireland and Spain. The UK has certainly had a bubble in housing and credit markets over the past half a decade. The banking sector in the UK has made significant losses. Calculations by NIESR suggest that if they were to re-state the value added of the banking sector in light of the losses then GDP growth in the UK since 2000 would be an average of 2.1 percent per annum instead of 2.5 percent per annum.

A similar situation was reported for Ireland. The permanent loss of output was estimated to amount to 10 percent of GDP. Potential output in Poland has not been much affected by domestic bubbles; it is rather affected by external shocks, which includes the effects of the financial crisis. In the past, also the Russian crisis and the EU accession were reported to have an effect on potential output.

Besides all the reasons reported above, potential output may decline for technical reasons, too. As filters play an important role in potential output estimates, history shows that cyclical downturns lead to a downward revision of potential output growth for the recent past. Estimates of international organisations are already showing a downward trend.

2. Estimated medium-term consequences in relation to other (financial) crisis

On the one hand, most participating institutes regard the current crisis to be the worst one since the Great Depression in the 1930. Because of its worldwide diffusion, the present crisis is considered to have the worst economic and financial consequences compared to any other crisis in the past three quarters of the century. Because of the huge imbalances mentioned above (housing market and credit bubbles, excessive private consumption) the medium-term consequences of the present financial crisis are expected be worse than other ones, too and it will most likely take several years to return to "normal".

On the other hand, economic policy reacted quickly and internationally coordinated. The timely and comprehensive expansive monetary and fiscal policy was assumed to be effective in order to prevent even worse effects in the economy. Additionally, the more efficient and internationally coordinated regulation of markets with potential high risks was appraised positively, too.