

De Økonomiske Råd 

The European Economy in the medium and long term

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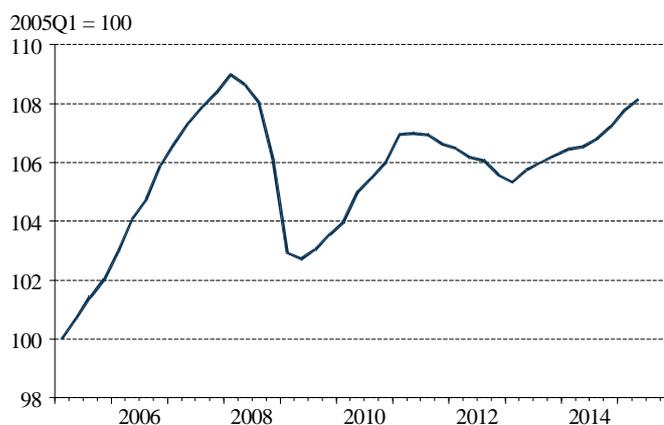
THE EUROPEAN ECONOMY IN THE MEDIUM TERM

I.1 The medium term outlook

The euro area has begun to recover at a moderate pace

The world economy has partially recovered from the disruptive effects of the financial crisis of 2008. The recovery has been supported by unprecedented expansionary monetary policy in many advanced economies. Also the euro area has begun to recover following the containment of the sovereign debt crisis, cf. Figure 1.

Figure 1 GDP in the euro area

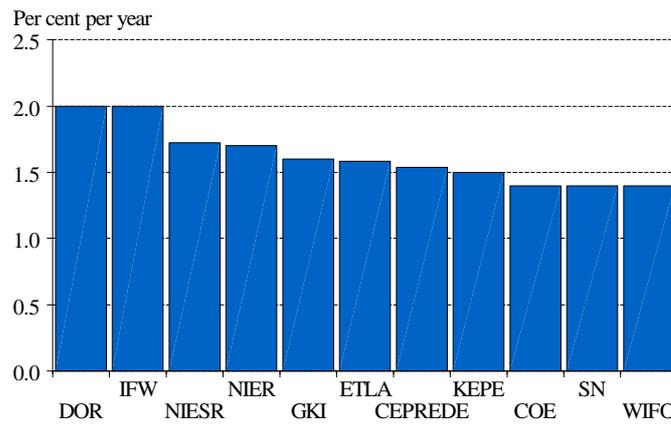


Source: Macrobond.

Expected growth of 1.6 per cent in the euro area in 2015-20

The AIECE institutes report estimates of average annual growth rates in the euro area between 1.4 and 2.0 per cent for the euro area in the period 2015-20, cf. Figure 2. The mean estimate is 1.6 per cent. This is not far from the average annual growth rate of 1.8 experienced by the euro area in the years 2000-8. As activity in the euro area is currently below potential this entails lower future potential growth than in the years before the Great Recession.

Figure 2 Estimates of GDP growth in the euro area, 2015-20



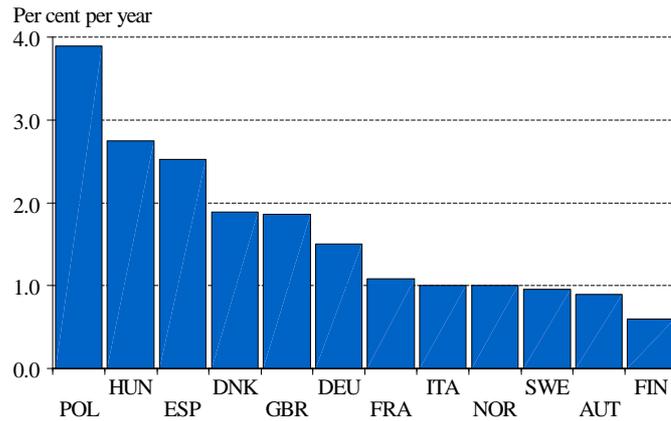
Note: The figure shows estimates of real GDP growth for the period 2015-20.

Source: AIECE institutes.

Substantial variation in prospects for per capita growth

According to the AIECE institutes there is substantial variation in the prospects for growth in GDP per capita in the years 2015-20 across European countries. Poland, Hungary and Spain are expected to grow more than 3 per cent on average each year. At the other end of the spectrum GDP per capita in Finland is expected to grow at only 0.6 per cent, cf. Figure 3. Presumably, the variation reflects a combination of differences in the scopes for structural productivity gains and the current stance of the business cycle among the countries.

Figure 3 Estimates of per capita GDP growth



Note: The figure shows per capita GDP growth for the period 2015-20. For countries with several AIECE institutes the average estimate of these institutes is shown.

Source: AIECE institutes.

I.2 Reforms

High structural unemployment due to labour market rigidities

In the questionnaire for the medium term report the AIECE institutes report a broad range of reform needs in their home countries cf. Appendix 1. Many European countries have high wage levels and relatively high minimum wages making it difficult for low-skilled workers to get a job. This contributes to high structural unemployment in e.g. France and Sweden. The problem is aggravated by the large inflow of refugees that may find entry to the job market hard. Further, wage contracts are quite inflexible in some countries and bargaining at the firm level is limited.

Heavily regulated goods markets in some countries

Many AIECE institutes call for reforms that promote price competition and creative destruction in the goods markets. In France the recent Macron-law has promoted price competition and reduced regulation in the goods markets but more initiatives are needed. The

need for reforms in this area is also pronounced in Greece and Slovenia.

Low retirement ages put strains on fiscal sustainability

Many European countries have reformed the pension system in recent years but more extensive initiatives are needed according to the responses of the AIECE institutes. Many countries have a low statutory retirement age and have not adopted indexation rules that link the retirement age to expected life time. A few countries, including Denmark and Finland, have adopted indexation rules. These rules help counter the pressures on fiscal sustainability from the ageing society.

Needs for public sector reforms particularly in Greece

In the public sector reform needs are pronounced in Greece according the response to the questionnaire. Greece struggles with inefficient bureaucracy, need for IT-systems, lack of targeted recruitment of public sector employees and corruption. Problems are less severe in Finland where the provision of health care and social services is unequally distributed among regions and financed from different channels with distorted incentives for stakeholders as a consequence.

Needs for reforms of housing markets in Sweden, the UK, and Denmark

According to the responses to the questionnaire Sweden has an issue with surging house prices and increasing household debt. Reforms like mandatory amortization, reduced tax-deduction of mortgage interest rates, property taxation etc. are needed to stabilize demand. Furthermore, it is necessary to promote the incentive for local governments and the private sector to increase construction activity as the inflow of migrants and refugees put an upward pressure on housing demand. Planning legislation probably has to be adjusted. Also the UK and Denmark have high private gross debt levels and widespread use of adjustable rate mortgages. In addition, the Danish property value tax is fixed in nominal terms and thus does not work to stabilize price developments.

I.3 Investments

Emerging consensus that weak investments mainly reflects the weak economy

Private fixed investments fell sharply in most advanced economies during the Great Recession, and this accounts for a significant part of the slump. Recently, a consensus seems to have emerged among leading institutions (including IMF and OECD) that weak investments mainly reflect weak economic activity rather than financial constraints and policy uncertainty, though these factors are also at play especially in vulnerable countries. The decline in investments is not out of line with the output contraction by historical standards, in surveys businesses tend to cite weak demand as the dominant factor, and ultra-low interest rates and elevated stock prices do not seem to spur many investments. Studies at the firm level often do find evidence of binding financial constraints, but the effects are probably not large enough to explain the bulk of the investment slump.

The majority of AIECE institutes agree with this narrative

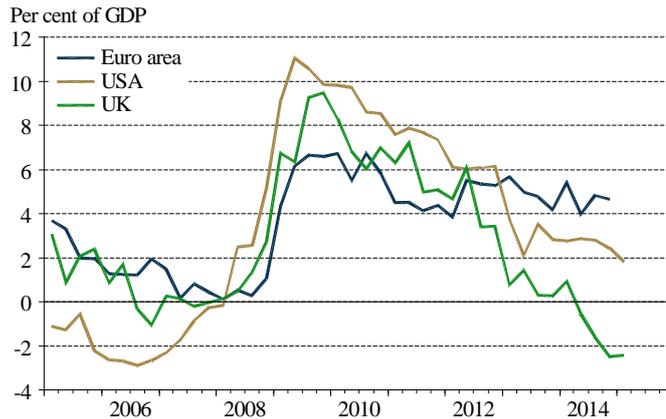
The majority of the responding AIECE institutes report that they agree with this narrative but some add that policy uncertainty, elevated risks, and a lack of spillover from public investment might also be important. The implication of this view is that investments will largely improve itself as the slump subsides over the medium term.

I.4 Deleveraging

Continued deleveraging in the euro area

Deleveraging efforts in the private sector have depressed output growth particularly in countries that built up large macroeconomic imbalances in the years preceding the financial crisis. Developments in private sector net lending suggest that the deleveraging process is advanced in the UK and the US but less so in the euro area, cf. Figure 4.

Figure 4 Private sector net lending



Source: Macrobond.

Deleveraging will impede growth in some countries

According to the responses from the AIECE institutes private sector deleveraging efforts are likely to impede the medium term developments in a number of European countries with the notable exceptions of Germany, France, and Sweden. In Sweden the private sector is even increasing debt levels, which is a cause of concern. In particular Sweden, the UK and Denmark have high gross debt levels implying that future monetary policy tightening may exert pressure on households and businesses. On the other hand, the private sector has positive net wealth in most countries. In Denmark this reflects among other sizeable pension savings.

I.5 Long-term technical progress

The majority of AIECE institutes expect a productivity slowdown

A small majority of the AIECE institutes agree with the view that future productivity growth will be relatively low due to a slowdown in technical progress. However, some argue that digital innovations create value beyond what is measured by macroeconomic productivity gains and that ongoing advances in au-

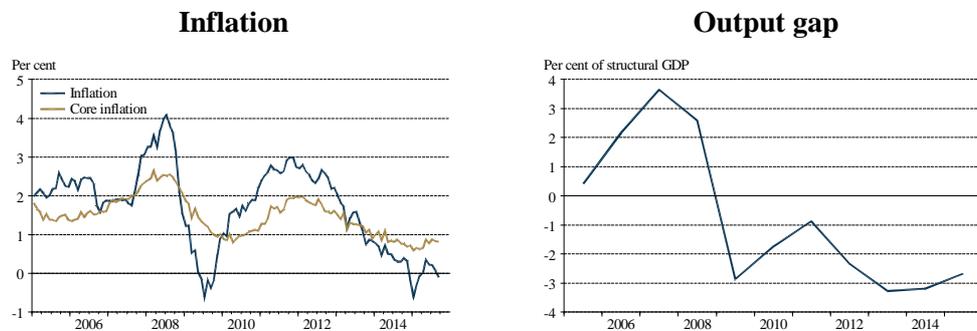
tomization and digitalization of the production process (“the smart factory”) has substantial potential for future productivity gains.

I.6 Secular stagnation

Concerns for secular stagnation in the euro area

The concept of secular stagnation has been revived by amongst others Lawrence Summers in the context of the slow recovery of many advanced economies following the Great Recession. Whereas the US is arguably well on the path towards full capacity there appears to be reason to be worried for the medium-run outlook for the euro area, cf. Figure 5.

Figure 5 Inflation and output gap in the euro area

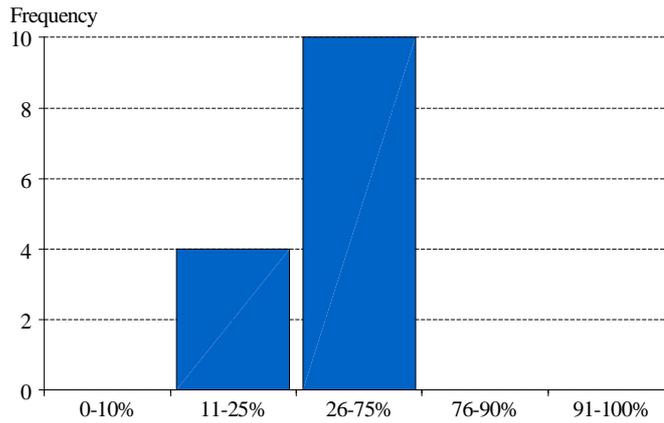


Note: The output gap is estimated by OECD.
Source: Macrobond and OECD.

Significant risk of secular stagnation

Interestingly, the majority of the responding AIECE institutes estimate the probability of secular stagnation in the euro area to exceed 25 per cent cf. Figure 6. This is arguably quite high. However, in view of the estimates of growth from 2015 to 2020 no institute has secular stagnation as the baseline scenario.

Figure 6 Risk of secular stagnation



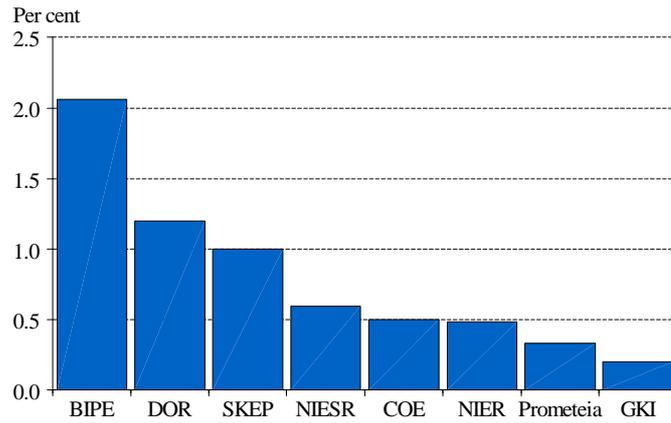
Note: The figure shows the distribution of estimates of the probability of secular stagnation in the euro area.

Source: AIECE institutes.

Considerable variation in the estimates of the ECB policy rate

There is considerable variation in the estimates of the average value of the key ECB policy rate from 2015 to 2020, cf. Figure 7. Though no institute seems to have secular stagnation as the baseline scenario a number of institutes have quite low estimates.

Figure 7 ECB policy rate, 2015-2020



Note: The figure shows the estimates of the average yearly value of ECB's main refinancing rate.

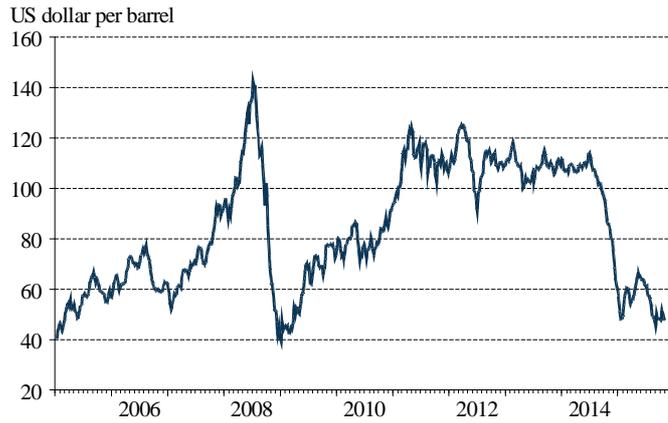
Source: AIECE institutes.

I.7 Oil price

Plummeting oil price

The oil price plummeted in the second half of 2014 and has fluctuated between 45 and 65 dollar per barrel in 2015, cf. Figure 8. The immediate causes seem to be the advent of the shale gas industry in North America, the large oil supply from OPEC-countries and the Iranian nuclear deal.

Figure 8 Oil price

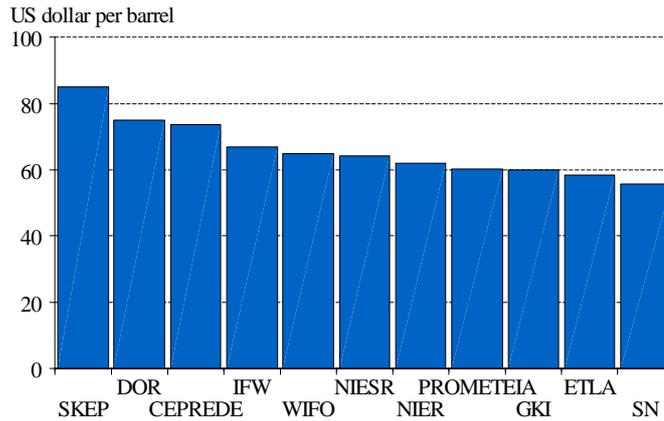


Source: Macrobond.

One third of AIECE institutes see the plummet as temporary

There is some disagreement among the AIECE institutes on whether the oil price is on a permanently lower path than before these developments. One third of the responding institutes report that they do not believe the oil price will be on permanently lower path. However, the estimates of the oil price in 2020 are not that different amongst the responding institutes cf. Figure 9.

Figure 9 Oil price in 2020



Source: AIECE institutes.

I.8 Topics for discussion

A long list of relevant topics for discussion

The responding AIECE institutes have reported a broad range of topics for discussion. All of the suggestions are relevant and important. Here we narrow the focus to topics that time permits us to discuss at the meeting and refer the reader to the appendix for an overview of the remaining topics.

How should we address the risk of secular stagnation?

In light of recent developments in the euro area, the risk of secular stagnation has moved up on the agenda. Is a decade of very slow growth and deflation a realistic scenario? If so, what can and should we do about it? Should the ECB extend its QE program? Does that even work? Should we ease fiscal policy despite elevated debt levels? Or should we keep calm and start planning the future unwinding of accommodative policy?

Where is the EU project headed?

In recent years the economic and political integration in the EU has been put under pressure from various sides. For some time the sovereign debt crisis endan-

gered the very existence of the euro, and still there is a dichotomy between euro area member states and non-euro member states. Furthermore, the UK is reconsidering its membership of the EU, and the inflow of migrants and refugees generates high political tensions. Are we facing a situation where it is no longer possible to establish consensus on important things? Where will the EU be in 10 years?

Is the low oil price a temporary phenomenon?

It is interesting to note that one third of the responding AIECE institutes report that they do not expect the oil price to be on a permanently lower path. The main arguments for a permanently, positive supply shock are the advent of the shale gas industry, the large OPEC supply, and Iranian nuclear deal. What are the arguments against?

Appendix I

Table 1a: BIPE (France), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,6	0,5	0,4		
Share of people of working age (1)	65,0	63,8	62,6		
GDP, volume	0,8	0,9	1,8		
GDP volume, per capita	0,2	0,4	1,5		
Private consumption, volume	1,5	0,6	1,6		
General government consumption, volume	1,6	1,5	0,3		
Gross fixed-capital formation, volume	0,4	-0,1	3,0		
Domestic demand (incl. Stockbuilding), volume	1,1	0,9	1,6		
Exports, goods and services, volume	1,0	4,1	4,1		
Imports, goods and services, volume	2,2	3,8	3,5		
Net exports, volume (2)	-1,3	-1,6	-1,1		
Savings rate of households (period average)	15,3	15,1	14,5		
Unemployment rate in percent (period average)	8,5	10,0	9,3		
Output gap (3)					
Structural GDP, volume					
GDP, volume:					
European union					
Euro area					
United States	0,8	2,1	2,0		
World					
Productivity (whole economy)	0,5	0,7	0,4		
Hours worked	-0,1	-0,1			
Hourly wages	2,7	1,6			
Current account balance (4)	0,0	0,0	0,0		
General government balance (4)	-4,4	-4,4	-2,5		
Primary general government net lending (4)					
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)	2,5	0,5	2,1		
Federal funds rate (1)	2,4	0,3	-		
Own country main policy rate (1)(5)					
Consumer prices	1,5	1,1	1,3		
Oil prices (6)					

Notes: (1) In percent, period average

(2) Change in percent of GDP previous year, period average

(3) In percent of potential GDP, period average

(4) In percent of GDP, period average

(5) If not euro area country

(6) Level in 2020 and 2020-2025

Date of forecast: September 2015

Appendix I

Table 1b: BIPE (France), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Ongoing reform on reducing employer's charges
Policies implemented to reverse the unemployment curve
Need of policies to increase the labour market flexibility

Goods market:

Pension system and retirement

Need to contain the pension scheme deficit
Need to extend the legal age at which one is allowed to get retired

The public sector

Ongoing Territorial reform
Need to Reduce public deficit
Need of a Fiscal simplification

Other?

Appendix I

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

No

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Yes.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Abrupt landing of the Chinese economy
Euro zone explosion
Deflation

Appendix I

Table 2a: Institute L. R. Klein-CEPREDE (Spain), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	1,7	0,1	-0,1	-0,1	
Share of people of working age (1)	84,4	84,0	84,2	84,9	
GDP, volume	1,8	-0,5	2,4	1,9	
GDP volume, per capita	0,2	-0,6	2,5	2,0	
Private consumption, volume	1,4	-0,9	2,1	1,4	
General government consumption, volume	5,4	-1,0	1,4	1,6	
Gross fixed-capital formation, volume	-0,3	-3,9	5,1	2,9	
Domestic demand (incl. Stockbuilding), volume	1,6	-1,6	2,6	1,7	
Exports, goods and services, volume	0,6	5,3	5,4	5,0	
Imports, goods and services, volume	0,0	1,4	6,2	4,9	
Net exports, volume (2)	0,2	1,1	-0,1	0,2	
Savings rate of households (period average)	10,0	10,5	8,1	9,1	
Unemployment rate in percent (period average)	11,0	23,3	21,1	18,7	
Output gap (3)					
Structural GDP, volume					
GDP, volume:					
European union					
Euro area	0,8	0,7	1,5	1,2	
United States	1,0	2,1	2,5	2,2	
World	3,8	3,9	3,8	3,6	
Productivity (whole economy)	0,9	1,9	0,6	0,5	
Hours worked	0,4	-2,4	1,7	1,3	
Hourly wages	5,7	0,5	1,9	2,5	
Current account balance (4)	-7,9	-1,0	0,2	0,7	
General government balance (4)	-2,0	-8,4	-3,6	-2,7	
Primary general government net lending (4)	-0,4	-5,6	-0,5	0,5	
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1) (5)					
Consumer prices	2,6	1,6	1,3	1,7	
Oil prices (6)	70,2	102,7	73,6	100,6	

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: September 2015

Appendix I

Table 2b: Institute L. R. Klein-CEPREDE (Spain), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Better regulation and more incentives to part-time work

Goods market:

Greater homogenization of regional and international regulation

Pension system and retirement

To promote the complement of the public system with private pension plans fiscally subsidized

The public sector

Rationalization of spending, avoid duplication and increase the taxation of unearned income

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Fully agree. The poor economic outlook reduces the profitability of new investment projects even in an environment of low interest rates

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

On the contrary, the lower indebtedness would allow further expansion in a better growth environment

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

of course, but a lower investment not necessary means less technical progress

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Appendix I

Table 3a: Coe-Rexecode (France), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,6	0,5	0,5		
Share of people of working age (1)					
GDP, volume	0,9	1,1	1,2		
GDP volume, per capita	0,3	0,6	0,7		
Private consumption, volume	1,6	0,8	1,3		
General government consumption, volume	1,5	1,5	1,1		
Gross fixed-capital formation, volume	1	0,4	1,4		
Domestic demand (incl. Stockbuilding), volume	1,3	1	1,2		
Exports, goods and services, volume	1,7	4,8	4,6		
Imports, goods and services, volume	3,1	4,5	4,4		
Net exports, volume (2)	-0,4	0	0		
Savings rate of households (period average)	15,2	15,2	14,4		
Unemployment rate in percent (period average)	8,2	9,5	9,8		
Output gap (3)					
Structural GDP, volume	1,6	1,3	1,1		
GDP, volume:					
European union	1,3	1,1	1,7		
Euro area	1,0	0,9	1,4		
United States	1,2	2,1	2,4		
World	3,8	3,6	3,2		
Productivity (whole economy)	0,4	0,1	0,6		
Hours worked	0,1	0	0,4		
Hourly wages	2,7	1,8	1,5		
Current account balance (4)	-0,8	-0,8	-0,5		
General government balance (4)	-4,2	-4,8	-3,6		
Primary general government net lending (4)	-1,6	-2,3			
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)		0,6	0,5		
Federal funds rate (1)		0,1	2,1		
Own country main policy rate (1)(5)					
Consumer prices	1,6	1,2	1,1		
Oil prices (6)	13	-8	100		

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: 16. October 2015

Appendix I

Table 3b: Coe-Rexecode (France), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

One part of the recent labour market reform includes an element of flexibility. The main idea is to reduce working hours in the event of an economic contraction. This agreement allows companies to negotiate with labour union representatives in order to lower working hours and wages for maximum two years. One another part proposes more security. For example, increasing the burden of taxation on precarious contracts that are determined to be abusive.

Despite this recent reform, France continues facing a high unemployment rate, reaching 10% of the labour force in the metropolitan France in the second quarter of 2015. It's necessary to make contracts more flexible and to simplify and to shorten layoff procedures. France needs to stimulate the participation of old people and to increase qualification of young people through apprenticeships. The system of job-search monitoring could be strengthened. The question of the cost of labour is important too, and notably the too high minimum cost of labour.

Goods market:

The government launched different initiatives to simplify regulation since 2013, notably the last Macron law. The Growth and Economic Activity law embraces a multitude of topics grouped by three main themes: lifting economic restrictions (at the coach transport sector and regulated legal professions), boosting investment (by strengthening procedures for protecting businesses, and improving financing by streamlining employee savings schemes, in particular), and creating jobs (with exceptions to Sunday and evening work requirements, and a reform of industrial tribunals, among others).

In spite of this law, it's necessary to facilitate price competition in retail sales. Unjustified restrictions in regulated sectors and professions should notably be deleted.

Pension system and retirement

A reform has been implemented in 2010, with mainly two ideas: the statutory retirement age from 60 to 62 and the full pension contribution period to 41,5 in 2020. As economic forecasts were too optimistic, budget balance was unlikely in 2020. So new measures have been set to bring the pension system into balance in 2017, but this balance remains temporary. Further measures to be taken in coming years could be: adapting indexation rules, increasing the statutory retirement age or increasing contribution period.

The public sector

France should rationalise public spending and improve the efficiency of public expenditure.

Other?

We think that the weakness in investments in France is a problem, caused by different factors. The poor economic outlook is a negative element, but there are other factors. Obstacles at work are many and powerful (sluggish European markets, lack of visibility, too high taxes on the capital). Companies are expected to maintain a wait-and-see approach.

Appendix I

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes. The signals point to a lack of investment demand rather than to a lack of financing capacity.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

No. The banking sector in the Eurozone has now finished its deleveraging cycle and deleveraging is well under way among non financial corporations. However, significant public deleveraging will need to be carried out in many countries.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Unsure. Digital innovations tend to spur value redistribution more than macroeconomic productivity gains.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

- Way out of nonconventional monetary policies
- Consequences of emerging countries structurally becoming net capital exporters
- Risk of a renewed Eurozone crisis (because disequilibria have not been eliminated)

Appendix I

Table 4a: CPB (Netherlands), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

Comments : Published June 2014

2005-10 2010-15 2015-20 2015-23 *moderate recovery scenario"

Population	0,4	0,4		0,3	
Share of people of working age (1)					
GDP, volume	1,3	0,6		1,6	These results are taken from our moderate growth scenario 2015-2023
GDP volume, per capita					
Private consumption, volume	0,1	-0,2		1,0	
General government consumption, volume	4,2	-0,3		1,0	
Gross fixed-capital formation, volume	0,2	1,0		2,0	
Domestic demand (incl. Stockbuilding), volume	1,3	-0,1		1,1	
Exports, goods and services, volume	3,0	3,6		3,9	
Imports, goods and services, volume	3,2	3,0		3,7	
Net exports, volume (2)	0,1	0,8		0,6	
Savings rate of households (period average)	4,4	7,1		5,5	
Unemployment rate in percent (period average)	4,4	6,5		6,1	
Output gap (3)					
Structural GDP, volume	1,6	1,0		1,0	
GDP, volume:					
European union					
Euro area	0,8	0,5			
United States	0,8	2,1			
World	3,9	3,6			
Productivity (whole economy)	0,5	0,9		0,9	
Hours worked	0,9	-0,1			
Hourly wages					
Current account balance (4)	7,3	10,3		11,3	
General government balance (4)	-2,0	-3,0		-0,4	Ultimo period
Primary general government net lending (4)					
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1)(5)					
Consumer prices	1,5	1,7		2,0	
Oil prices (6)	79,5	57,2		112,2	Ultimo period

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2010, 2015 and 2023

Date of forecast: June 2014

Appendix I

Table 4b: CPB (Netherlands), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

The challenge at the labour market is to get the older unemployed people back to work

Goods market:

Pension system and retirement

The public sector

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes, we don't see structural problems with investments

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Yes, in the Netherlands further deleveraging of especially households leads to weaker growth of private consumption in investments of houses

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

No, we expect technical progress will return to pre-crisis growth rates

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Appendix I

Table 5a: DIW Berlin (Germany), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population					not reported
Share of people of working age (1)	-0,2	0,0	0,0		Working age population (15-74)
GDP, volume	1,2	1,5	1,5		
GDP volume, per capita	1,4	1,5	1,5		calculated with working age population (15-74)
Private consumption, volume	0,5	1,2	1,5		
General government consumption, volume	2,0	1,4	1,4		
Gross fixed-capital formation, volume	1,8	0,6	1,8		
Domestic demand (incl. Stockbuilding), volume					not reported
Exports, goods and services, volume	4,2	4,5	4,3		
Imports, goods and services, volume	4,3	3,9	4,8		
Net exports, volume (2)	5,5	7,7	-0,3		
Savings rate of households (period average)	10,1	9,4	9,6		
Unemployment rate in percent (period average)	8,7	6,8			BA concept, only reported until 2016
Output gap (3)	-0,3	0,2	0,2		
Structural GDP, volume	1,1	1,2	1,5		
GDP, volume:					not reported
European union					only reported until 2016
Euro area	0,8	0,6			only reported until 2016
United States	0,8	2,1			only reported until 2016
World	4,0	3,8			only reported until 2016
Productivity (whole economy)	1,1	0,7	1,1		
Hours worked	-0,3	-0,3	0,1		
Hourly wages	1,6	2,9	2,9		
Current account balance (4)	5,9	7,0			only reported until 2016
General government balance (4)	-1,8	0,0			only reported until 2016
Primary general government net lending (4)					not reported
Cyclically adjusted general government net lending (3)					not reported
ECB refinancing rate (1)					only reported until 2016
Federal funds rate (1)					not reported
Own country main policy rate (1)(5)					not reported
Consumer prices					only reported until 2016
Oil prices (6)					only reported until 2016

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: 16. September 2015

Appendix I

Table 5b: DIW Berlin (Germany), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Reduction in labour costs;

The demand for higher wages could be responded to by reducing indirect labour costs or social security contributions. Given the good financial situation in Germany, this increase in net wages not necessarily need to be counter financed.

Goods market:

Pension system and retirement

The additional expenditure (mid 2014) extended the volume of spending which is beyond the insurance principle.

The "Mütterrente" (additional retirement payments for children that have been borne before 1992) can be justified with political or social concerns but not with the insurance principle.

The "Rente mit 63" (the possibility of an early retirement for assured persons with more than 45 years of contribution) increases expenditure, reduces revenue and decreases labour force potential.

C.p. the new measures require a higher contribution rate, raise the burden on labour income and, thus, reduce the participation in the labour market.

The public sector

The demographic challenge is the main challenge in the coming years. Labour force potential will decline and, thus, potential growth. Next to investment policy should aim on increasing participation in the labour market by improving the incentives.

Next to a reform of the income tax a general reduction of duties on work should be considered.

Compared to other European countries the tax burden (income tax) in Germany is below average. In contrast social security contributions are at a high level and the overall burden on labour income is higher than in other countries.

This is not - only - a result of a higher level of transfers or retirement payments. In fact, a high volume of expenditure is beyond the insurance principle. These payments should not be financed by social contributions but by tax revenue and the contribution rate should be reduced.

Appendix I

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes, but not entirely:

There are additional domestic constraints. Energy transition comes together with regulatory uncertainty .

Public investment is not sufficient and by consequence positive spillovers for private investment are missing.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Not so much a problem for Germany

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Probably.

The negative trend in tfp residuum may be due to too low investment , too low investment in education or R&D.

Innovations are no longer large ones like the steam engine or the IT revolution.

Innovations in consumption goods is what we see mostly these days.

Industry 4.0 has the potential to deliver a large impulse for productivity.

6) How do you assess the risks of secular stagnation in the euro area?

0-10 pct.

11-25 pct.

26-75 pct.

76-90 pct.

91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

Yes

No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Weakness of China, Russia, and Brasil.

Appendix I

Table 6a: GKI Economic Research Co. (Hungary), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	10,1	9,9	9,8	9,7	
Share of people of working age (1)	49,8	51,4	54,5	55,5	
GDP, volume	0,5	1,5	2,4	2,4	
GDP volume, per capita	1,2	1,9	2,7	2,6	
Private consumption, volume	-0,9	0,0	1,6	1,9	
General government consumption, volume	0,9	1,8	0,0	0,5	
Gross fixed-capital formation, volume	-1,5	0,3	1,4	3,1	
Domestic demand (incl. Stockbuilding), volume	-1,3	0,4	1,6	2,2	
Exports, goods and services, volume	8,7	6,2	4,9	3,5	
Imports, goods and services, volume	5,9	5,3	4,5	3,2	
Net exports, volume (2)	2,6	0,9	0,4	0,3	
Savings rate of households (period average)	3,6	4,6	5,0	5,5	
Unemployment rate in percent (period average)	8,4	9,6	6,7	6,0	
Output gap (3)	1,6	-3,7	-0,7	-0,3	
Structural GDP, volume					
GDP, volume:					
European union			1,8	2,0	
Euro area			1,6	1,8	
United States			2,5	2,7	
World			3,5	3,8	
Productivity (whole economy)	1,0	0,3	0,5	0,5	
Hours worked					
Hourly wages	6,1	3,4	5,0	4,5	
Current account balance (4)	-6,5	2,4	4,9	3,0	
General government balance (4)	-5,9	-3,5	-2,2	-2,1	
Primary general government net lending (4)	n.a.	n.a.	n.a.	n.a.	
Cyclically adjusted general government net lending (3)	n.a.	n.a.	n.a.	n.a.	
ECB refinancing rate (1)			0,2	0,5	
Federal funds rate (1)			0,4	1,0	
Own country main policy rate (1)(5)	7,25	4,1	1,5	1,5	
Consumer prices	4,8	5,8	2,8	2,3	
Oil prices (6)	72,0	91,3	60,0	70,0	

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 12. October 2015

Appendix I

Table 6b: GKI Economic Research Co. (Hungary), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

The government made the labour market more flexible by the introduction of changes in the legal rules. If trade unions, employees and employers cooperate reasonably, efficiency may be raised under the new rules. Nevertheless, as a result of the introduced changes, the vulnerability of employees increased.

The government diminished the length of the provision of unemployment benefits to 3 months that is an unprecedentedly short period by international standards. Simultaneously it launched public workfare schemes, in which some 200 thousand people are involved currently. Thereby the unemployment rate decreased in statistical terms, but since the jobs created this way are not sustainable, public workfare disguises unemployment to a rather large extent. Although being involved in public workfare is more advantageous in sociological terms from the point of view of both the individuals and the society, it does not allow the return to real employment for those concerned. Therefore, the present form of public workfare is a major obstacle to the increase of sustainable jobs.

Goods market:

Huge segments of the goods market are distorted by government regulation. In its attempt to reduce overheads, the government diminished electricity and natural gas prices for households by law rather than having relied on market forces such as in the Czech Republic and elsewhere in the EU. The service providers have to bear the resulting losses. Similar measures were implemented in other utilities such as chimney sweeping and garbage collection. In the next stage the government intends to nationalise segments of public utilities meeting households' needs; this does not bode well for the future.

The retail and wholesale market of cigarettes and tobacco, too, was reorganised by establishing monopoly and/or quasi monopoly positions with subsequent price rises.

The government ordered by law that with some minor exceptions undertakings in retail trade (shops, supermarkets, etc.) should be kept closed on Sundays. This measure, too, affects the goods market.

Legal measures restricting sales of medicines and related products were also taken in the pharmacy business. The liberalisation measures of the previous government were withdrawn.

Pension system and retirement

The government nationalised the assets of private pension funds in 2010 and 2011 with the aim of reducing the government debt ratio. The pay-as-you-go system works in the short run, but no appropriate measures were taken to ensure its long-term sustainability.

The public sector

Due to the withdrawal of funds and other measures, the public sector is facing enormous challenges. The healthcare system is close to collapse. There are unbearable tensions in the educational system due to partly insufficient funding and partly to the introduction of outdated ideas. There are no signs of structural reforms.

Other?

Appendix I

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes, we do. Sluggish investments are related to uncertainty and risks. It is true that in the past, substantial investment has been accomplished only at times of widespread optimism about economic prospects. Nevertheless, as labour becomes scarce and wages rise, profit maximising companies will look to add some physical capital to offset some of those costs. The result will be rising productivity.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Deleveraging seems to be a drag on GDP growth in the medium term, but it is likely to be phased out afterwards.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

In advanced economies productivity growth depends on not only technical progress, but on several other factors as well. If it comes to a slowdown in technical progress, productivity growth may not necessarily decelerate. Most investors equate increasing productivity with solid business investment. Companies buy new equipment that enable employees to produce more output for each hour they work.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Appendix I

Table 7a: IBRKK (Poland), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,2	0,0	-0,1	-0,2	
Share of people of working age (1)	71,3	69,3	66,3	64,5	15-64, end of period
GDP, volume	3,5	3,1	3,6	2-3%	
GDP volume, per capita	5,0	3,3	3,9	2-3%	
Private consumption, volume	5,1	2,4	3,0		
General government consumption, volume	4,4	1,8	1,3		
Gross fixed-capital formation, volume	8,6	5,4	5,4		
Domestic demand (incl. Stockbuilding), volume	5,6	2,7	3,5		
Exports, goods and services, volume	8,8	6,5	5,0		
Imports, goods and services, volume	9,9	5,3	6,0		
Net exports, volume (2)	-2,0	3,3	-1,8		
Savings rate of households (period average)	9,3	2,0	1,0		net
Unemployment rate in percent (period average)	9,0	9,1	7,5	7,3	2006-2010, 2011-2015
Output gap (3)	1,2	2,4	0,0	0,0	
Structural GDP, volume					
GDP, volume:					
European union					
Euro area					
United States					
World					
Productivity (whole economy)	1,4	0,4			TFP
Hours worked	-0,4	-0,3			OECD
Hourly wages	4,4	3,2			2014 current prices and NCU
Current account balance (4)	-4,7	-3,3	-2,0		
General government balance (4)	-2,7	-3,3	-1,8		
Primary general government net lending (4)	-2,5	-1,4	-1,0		2006-2010, 2011-2015
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1) (5)	4,3	3,4			
Consumer prices	2,7	1,8	2,5		
Oil prices (6)					

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 13. October 2015

Appendix I

Table 7b: IBRKK (Poland), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

low level of wages (according to the European standards) versus necessary level of export competitiveness; still too low job participation, flexible versus permanent job contracts;

Goods market:

very few of innovative genuinely home products - among others due to the structure of the capital inflow (also FDI structure)

Pension system and retirement

system is under continuous changes; is not balanced and requires deep rearrangement - only possible if there is political consensus

The public sector

tax system is obsolete and should be almost completely rebuilt;

Other?

low savings level - versus low wages; growing importance for the increase of export of goods and capital to stabilize external equilibrium and avoid financial stress

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

what a "poor economic outlook" mean specifically ? That kind of explanation means that we don't no why it goes that way or what to ask about

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

This is not the main problem, ruther lack of development concept; on the other hand, the situation is different in different countries; too often we judge based on the aggregates

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Yes, but we should distinguish between USA ,Europe and Asia; UE is weak mostly because of lack of the leadership (poor European Commission government) and lack of future political concept; the proposed so far structural reforms did not delivere; Asia is entangled in the regional problems etc.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

What are risks of deep crisis in the UE - split between core (EMU) if consolidated and the rest of EU

Appendix I

Table 8a: KEPE (Greece), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	11,2	11,0			
Share of people of working age (1)	66,5	65,2			
GDP, volume	-0,5	-3,7			
GDP volume, per capita	-0,2	-4,2			
Private consumption, volume	3,9	-3,8			
General government consumption, volume	7,1	-8,5			
Gross fixed-capital formation, volume	-2,0	-14,0			
Domestic demand (incl. Stockbuilding), volume	-0,1	-5,1			
Exports, goods and services, volume	3,5	3,1			
Imports, goods and services, volume	3,4	-5,8			
Net exports, volume (2)	-16,2	-11,1			
Savings rate of households (period average)					
Unemployment rate in percent (period average)	9,5	24,4			
Output gap (3)	10,0	-5,0	-1,5		
Structural GDP, volume					
GDP, volume:					
European union	1,1	0,9	1,7		
Euro area	1,0	0,5	1,5		
United States	1,1	2,0	2,5		
World	4,0	3,4	3,7		
Productivity (whole economy)	1,0	0,5	1,3		
Hours worked					
Hourly wages					
Current account balance (4)	-11,1	-3,5			
General government balance (4)	-9,8	-7,8			
Primary general government net lending (4)	-2,3	-0,1			
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)	2,4	0,4			
Federal funds rate (1)					
Own country main policy rate (1)(5)					
Consumer prices	3,3	0,1			
Oil prices (6)					

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: 17. October 2015

Appendix I

Table 8b: KEPE (Greece), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Enhancement of labour market mobility and flexibility, simplification of the Labour Code, further liberalization of certain professions.

Goods market:

Easing of regulation, fees and costs that create excess financial burdens and interfere with competition and access to the markets (e.g. in the food and pharmaceuticals markets)

Pension system and retirement

(a) Rationalization of system resources (e.g. reduction in operating costs by fully integrating social security funds, abolition of unjustified privileges, rationalization of multiple pensions etc.), (b) fight against contribution evasion and avoidance to increase collectability, (c) provide incentives to remain in employment by creating a rational link between main and proportional pensions and the impact on replacement rates.

More generally, reverse ageing population, encourage declared work and cost undertaking by the private sector.

The public sector

Simplify and modernize procedures by radically reforming existing structures, eliminate bureaucracy, fully introduce e-Governance, enhance the interconnection between services and the coordination among public agencies, strengthen supervisory and auditing mechanisms to fight against corruption and enforce liability and accountability, focus more on targeted recruitment, mobility and performance incentives.

Other?

Reforms to rationalize the Judicial system of the country, transparency & stability of the tax system.

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

2%

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

The very accommodative monetary policy stance (low interest rates) should stimulate business investment. However, investment behaviour is governed, among other things, by expectation of profit which, in turn, is a function of entrepreneurs' perceptions about the evolution of economy. From this perspective, a poor economic outlook weights on business investment.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Continued deleveraging efforts by the private sector will constrain the medium-run outlook in countries where firms' and households' indebtedness remains at high levels.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

We agree that a slowdown in technical progress will imply a slowdown in total factor productivity. This will adversely affect future productivity growth of advanced economies.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Geopolitical risks.

Appendix I

Table 9: Statistics Norway (Norway), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	1,0	1,3	1,1	1,0	2005-2009, 2010-2014 and 2015- 2018 , no forecasts after 2018, except population
Share of people of working age (1)	72,8	71,4	70,6		
GDP, volume	3,1	2,4	2,1		Mainland Norway
GDP volume, per capita	2,1	1,1	1,0		
Private consumption, volume	3,3	2,7	2,5		
General government consumption, volume	2,5	1,8	2,4		
Gross fixed-capital formation, volume	5,4	3,2	0,6		
Domestic demand (incl. Stockbuilding), volume	3,3	2,3	2,8		
Exports, goods and services, volume	3,2	1,3	4,3		Traditional goods and services
Imports, goods and services, volume	4,0	4,3	2,8		
Net exports, volume (2)					
Savings rate of households (period average)	4,0	6,8	8,6		
Unemployment rate in percent (period average)	3,3	3,4	4,3		
Output gap (3)					
Structural GDP, volume					
GDP, volume:					
European union					
Euro area	0,8	0,6	1,4		
United States	0,9	2,2	2,6		
World					
Productivity (whole economy)					
Hours worked					
Hourly wages	4,7	3,8	2,9		
Current account balance (4)	14,2	11,4	5,4		
General government balance (4)					
Primary general government net lending (4)					
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1)(5)	3,5	1,9	0,9		
Consumer prices	2,1	1,7	2,2		
Oil prices (6)	71,0	102,2	55,8		

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 3. September 2015

Appendix I

Table 10a: NIER (Sweden), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-24	Comments
Population	0,8	0,9	1,3	1,1	
Share of people of working age (1)	74,5	74,5	73,3	72,4	Age 15-74
GDP, volume	1,7	1,9	2,2	2,2	
GDP volume, per capita	0,9	1,0	1,0	1,0	
Private consumption, volume	2,2	1,9	2,5	2,4	
General government consumption, volume	1,4	1,5	1,9	1,8	
Gross fixed-capital formation, volume	3,3	3,2	3,0	2,9	
Domestic demand (incl. Stockbuilding), volume	2,1	2,1	2,5	2,4	
Exports, goods and services, volume	2,5	2,9	4,0	3,9	
Imports, goods and services, volume	3,7	3,5	4,7	4,5	
Net exports, volume (2)	-0,3	-0,1	-0,1	-0,1	
Savings rate of households (period average)	2,3	7,5	6,8	5,7	
Unemployment rate in percent (period average)	7,3	7,9	6,9	6,9	
Output gap (3)	-0,7	-1,7	0,0	0,0	
Structural GDP, volume	1,9	1,7	2,0	2,0	
GDP, volume:					
European union	1,1	1,2		2,0	Number in last column is period average for 2015-2017
Euro area	1,0	0,8	1,7	1,7	
United States	1,2	2,1	2,6	2,5	
World	4,1	3,8	3,8	3,8	
Productivity (whole economy)	0,6	0,8	1,2	1,3	
Hours worked	1,1	1,2	1,1	0,8	
Hourly wages	3,0	2,5	3,2	3,3	
Current account balance (4)	7,9	6,1	5,9	5,4	
General government balance (4)	1,3	-1,0	0,1	0,6	
Primary general government net lending (4)	0,8	-1,8	-0,6	-0,3	
Cyclically adjusted general government net lending (3)	1,6	-0,3	0,2	0,6	
ECB refinancing rate (1)	2,5	0,6	0,5	1,4	
Federal funds rate (1)	2,6	0,3	2,0	2,9	
Own country main policy rate (1) (5)	2,1	0,8	0,7	1,7	
Consumer prices	1,9	0,9	2,0	2,0	
Oil prices (6)		55	62		Annual average 2015 and 2020 respectively

Notes:

- (1) In percent, period average
- (2) Change in percent of GDP previous year, period average
- (3) In percent of potential GDP, period average
- (4) In percent of GDP, period average
- (5) If not euro area country
- (6) Level in 2020 and 2020-2025

Note: 2025 is not available

Date of forecast: 18. September 2015

Appendix I

Table 10b: NIER (Sweden), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

The employment rate is high in Sweden, but unemployment is high as well. A substantial part of the unemployed have low skills and there is a growing matching problem on the labour market. The active labour market programs (ALMP) are on a historically high levels. At the same time minimum wages are relatively high in Sweden. This makes it difficult for persons with little education/relevant experience to get a job. Wages (including minimum wages) are negotiated by employers and employees. The labour market policy needs to address this problem by, one way or the other, making it more attractive to hire persons with little education/relevant experience. The problem is highlighted by the large inflow of refugees to Sweden.

Goods market:

Pension system and retirement

The Swedish pension system was reformed in the late 1990s and it is now more or less self-contained and should be sustainable. Increasing life expectancy, however, will put pressure on public finances unless retirement age increases as well. Hence, it is desirable that reforms are undertaken that support persons to continue to work at higher age.

The public sector

Other?

The problems in the housing market, with surging prices and increasing household debts, should be addressed. The construction of new houses/apartments has for several years been outstripped by increasing demand. The ongoing massive inflow of refugees (and other migrants) enhances these problems. Supply-side reforms must be undertaken (increasing incentives for local governments and the private sector, shorten the planning process etc.). But it will take time for such reforms to have a real impact. Hence, to stop the rapid increase in housing prices sooner than that, it is probably necessary to implement reforms that increase the cost/cash-flow of owning your own home (e.g. reducing tax-deductions on mortgage interest rates, reintroduction of property tax, mandatory amortisation etc.). This will not be popular, but there is a growing political consensus on these matters.

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

-1.1

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Probably true.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

In Sweden there is no general deleveraging process going on in the private sector. In the household sector debt is rising rapidly.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

If the bench-mark is the technological progress and productivity growth experienced before the great recession: Yes. If the bench-mark is 2009 and onwards: No.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Appendix I

Table 11a: ETLA (Finland), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,4	0,4	0,5	0,5	
Share of people of working age (1)	66,4	64,7	62,4	62,4	
GDP, volume	0,8	0,5	1,0	1,0	
GDP volume, per capita		-0,5	0,6	0,6	
Private consumption, volume	2,0	1,3	0,5	0,5	
General government consumption, volume	1,5	0,2	-0,1	-0,1	
Gross fixed-capital formation, volume	0,2	-1,2	2,0	2,0	
Domestic demand (incl. Stockbuilding), volume	1,0	1,0	0,6	0,6	
Exports, goods and services, volume	1,8	1,9	2,5	2,5	
Imports, goods and services, volume	2,7	2,8	1,8	1,8	
Net exports, volume (2)					
Savings rate of households (period average)	1,6	1,5	0,9	1,0	
Unemployment rate in percent (period average)	7,7	8,4	9,5	9,5	
Output gap (3)	0,4	-2,3			
Structural GDP, volume	0,5	0,0		..	
GDP, volume:					
European union	1,1	0,9	1,9	1,8	
Euro area	0,9	0,5	1,6	1,6	
United States	0,8	2,3	2,4	2,1	
World	3,9	3,6	3,9	3,9	
Productivity (whole economy)	0,2	-0,1	1,2	1,2	
Hours worked	0,3	-0,2	0,1	0,1	
Hourly wages	3,7	2,2	1,3	1,5	
Current account balance (4)	3,2	-1,2	0,1	1,5	
General government balance (4)	-1,6	-2,4	-2,0	..	
Primary general government net lending (4)	-3,3	1,0	0,8	..	
Cyclically adjusted general government net lending (3)	-1,5	1,2	..	..
ECB refinancing rate (1)x	2,4	0,42	..	..
Federal funds rate (1)x	2,05	0,25	..	..
Own country main policy rate (1) (5)	..	..	..	..
Consumer prices	1,9	1,7	1,3	1,6	
Oil prices (6)	75,4	107,9	58,5	62,9	

Notes: (1) In percent, period average

(2) Change in percent of GDP previous year, period average

(3) In percent of potential GDP, period average

(4) In percent of GDP, period average

(5) If not euro area country

(6) Level in 2020 and 2020-2025

x average of end of year rates

Date of forecast: 23. September 2015

Appendix I

Table 11b: ETLA (Finland), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

More decentralized wage bargaining , at the firm level. In the short run, however, the form is not as important as the contents (modest wage increases).

Goods market:

More competition in the retail sector.

Pension system and retirement

The rules of the Finnish mandatory earnings related pension system will be changed from the beginning of 2017 as follows.
The lowest eligibility age for old age pensions will increase gradually from 63 in 2017 to 65 in 2025. After that it will be linked to life expectancy. Higher accrual rates after the lowest eligibility age will be replaced by increment for deferred withdrawal of the pension. Employees' pension contribution rate will not be deducted from pensionable wage. The existing life expectancy coefficient will be decreased. Years-of-service pensions will be introduced allowing early retirement with less stringent medical checking.
Higher retirement age for old age pensions will make the other routes (such as extended period of unemployment benefits) and the years-of-service pensions more lucrative. If access to these routes will not be tightened, the fiscal sustainability results of the reform are endangered, as well as the adequacy of pensions.

The public sector

Public health and social care is organized, produced and mainly financed by municipalities and federations of municipalities in Finland. The integration of primary health care, special health care and social services is poor. Access to services is unequal. The multi-channel financing of the services distorts incentives of the stakeholders. These problems will be addressed in a large ongoing reform, which aims to transfer the organization and production tasks to broader areas, merge the financing channels and add centralized fiscal sustainability control to the service provision.

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

-2 %

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes, we agree.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Yes, but slowly easing.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Main factor is shrinking labour force. TFP rise will support growth.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Impacts of a slow down of China
Strongly decreased elasticity of trade on growth

Appendix I

Table 12: KOF Swiss Economic Institute (Switzerland), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Goods market:

Pension system and retirement

A pension reform is likely to be passed and be implemented from 2020 onwards. Main points :

- 1 -Alignment of the women retirement age to the one for men. It is going to be 65 for everyone but with some more flexibility.
- 2- The earliest possible age (58) to retire should be revised upwards
- 3- Conversion rate should be lowered to account for aging
- 4- Benefits should be increased in favor of the poorer retirees
- 5- VAT is likely to be increased

NOTE : time horizon of the reform is not before 2020

The public sector

In 2015/2016 the public sector should suffer from lower revenue due to the franc shock. This should last until 2016 since revenue from personal income usually react with some delay.

On the longer horizon, the third corporate tax reform is one of the most important challenge faced by the public sector. This reform seeks the abolition of preferential tax regimes for some types of multinationals together with new deductions for R&D as well as a general decrease in the corporate tax rates. The reform should create revenue shortfall, at least in the short run, but should also foster innovation and growth and, therefore, revenue for the public sector in the medium-long run). Its implementation is planned from 2019 onwards.

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

We could not reach a consensus regarding this question.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

We would not formulate it this way. Rather, we would say that more cautious credit supply and more cautious investment activity in some sectors - as compared to the overoptimistic activity before 2008 - results medium-run forecasts that are below the growth figures observed in the period before the Great Recession.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

We do not see reasons for this scenario.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

BREXIT: The UK leaving the EU will destroy the traditional power balance within the EU. A longer period of power struggle might follow (possibly including further decouplings). A further issue is how exactly the UK will be "affiliated" with the EU after having officially left it. Years of negotiations with increased policy uncertainty might follow.

Appendix I

Table 13: WIFO (Austria), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,3	0,6	0,6		
Share of people of working age (1)	67,5	67,4	66,7		
GDP, volume	1,3	1,0	1,5		
GDP volume, per capita	1,0	0,4	0,9		
Private consumption, volume	1,1	0,5	1,3		
General government consumption, volume	2,2	0,5	0,8		
Gross fixed-capital formation, volume	-0,5	1,5	1,8		
Domestic demand (incl. Stockbuilding), volume	1,0	0,7	1,4		
Exports, goods and services, volume	2,7	2,6	3,7		
Imports, goods and services, volume	2,1	2,2	3,6		
Net exports, volume (2)					
Savings rate of households (period average)	11,3	7,9	8,4		
Unemployment rate in percent (period average)	4,9	5,3	6,0		Eurostat definition
Output gap (3)	0,1	-0,9	-0,6		
Structural GDP, volume					
GDP, volume:					
European union	0,9	1,0	1,7		
Euro area	0,8	0,5	1,4		
United States	0,8	2,0	2,5		
World	3,9	3,5	3,6		
Productivity (whole economy)	0,1	0,0	0,4		
Hours worked					
Hourly wages					
Current account balance (4)					
General government balance (4)	-3,0	-2,1	-1,2		
Primary general government net lending (4)	0,1	0,5	1,0		
Cyclically adjusted general government net lending (3)	-3,1	-1,6	-0,8		In percent of GDP, period average
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1)(5)					
Consumer prices	1,9	2,1	1,8		
Oil prices (6)	75	97	65		Level in 2020: 67

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 13. October 2015

Appendix I

Table 14a: NIESR (United Kingdom), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,8	0,7	0,7	0,6	
Share of people of working age (1)	0,6	0,6	0,6	0,6	
GDP, volume	0,9	1,9	2,5	2,4	
GDP volume, per capita	0,2	1,2	1,9	2,4	
Private consumption, volume	0,7	1,5	2,6	2,5	
General government consumption, volume	1,5	0,8	0,8	3,0	
Gross fixed-capital formation, volume	-0,7	4,4	4,4	1,5	
Domestic demand (incl. Stockbuilding), volume	0,7	2,1	2,5	2,4	
Exports, goods and services, volume	3,0	3,1	4,9	3,0	
Imports, goods and services, volume	2,1	3,7	4,9	3,0	
Net exports, volume (2)	0,6	20,7	4,3	3,0	
Savings rate of households (period average)	7,7	7,7	5,3	8,9	
Unemployment rate in percent (period average)	6,1	7,2	5,3	5,5	
Output gap (3)					
Structural GDP, volume					
GDP, volume:					
European union	1,1	1,1	2,0	1,5	
Euro area	1,0	0,8	1,7	1,3	
United States	1,2	2,2	2,8	2,5	
World	4,1	3,8	3,8	3,5	
Productivity (whole economy)	0,8	0,5	1,6	2,0	
Hours worked	0,2	1,4	0,9	0,3	
Hourly wages	3,8	1,4	2,6	3,5	
Current account balance (4)	-2,6	-4,0	-4,7	-3,4	
General government balance (4)	-5,8	-6,8	-1,6	-0,3	
Primary general government net lending (4)	-3,8	-4,3	0,4	1,3	
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)	2,47	0,65	0,59	2,45	
Federal funds rate (1)	2,63	0,26	2,37	3,94	
Own country main policy rate (1)(5)	3,44	0,50	1,54	3,49	
Consumer prices	2,6	2,4	1,5	2,0	
Oil prices (6)	17,6	2,2	64,2	68,2	

Notes:

- (1) In percent, period average
- (2) Change in percent of GDP previous year, period average
- (3) In percent of potential GDP, period average
- (4) In percent of GDP, period average
- (5) If not euro area country
- (6) Level in 2020 and 2020-2025

Date of forecast: 28. July 2015

Appendix I

Table 14b: NIESR (United Kingdom), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

We need to improve the quality of apprenticeships and vocational routes to qualifications in the UK.

Goods market:

Pension system and retirement

The UK government has committed itself to a triple guarantee on state pensions - they will rise by consumer price inflation/wages or 2.5%, whichever is the highest. This makes it more difficult to implement fiscal sustainability in the long run.

The public sector

Other?

Housing policy is a mess in the UK. The lack of housebuilding has been a serious issue for the UK for decades. Reforming planning legislation and the tax treatment of housing is economically essential, but politically unlikely over the course of the next five years.

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

I do agree with this.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

I think this is a risk. The debt to income ratio of the UK household sector is the second highest in the G7 (after Canada). With monetary policy tightening in our forecast, the structure of the UK mortgage market means that household income gearing will rise relatively quickly, weighing on the disposable incomes of mortgage holding households.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

I think this is a risk.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Euro Area crisis getting significantly worse.
The risk of sequestration due to the US debt ceiling manifesting in a significant cut to government consumption at some point over the next five years.

Appendix I

Table 15a: Prometeia (Italy), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,6	0,4	0,2		
Share of people of working age (1)	65,8	65	64,6		
GDP, volume	0,0	-0,3	1,2		
GDP volume, per capita	-0,7	-0,7	1,0		
Private consumption, volume	2,6	-0,7	1,0		
General government consumption, volume	0,4	-0,8	-0,3		
Gross fixed-capital formation, volume	-1,2	-3,3	3,0		
Domestic demand (incl. Stockbuilding), volume	0,1	-1,1	1,2		
Exports, goods and services, volume	1,4	4,7	4,6		
Imports, goods and services, volume	2,0	1,5	4,7		
Net exports, volume (2)	-1,1	0,7	0,2		
Savings rate of households (period average)	11,1	8,3	9,5		
Unemployment rate in percent (period average)	7,2	10,8	10,7		
Output gap (3)		-3,4	-1,1		
Structural GDP, volume	0,3	-0,4	0,5		
GDP, volume:					
European union					
Euro area					
United States					
World					
Productivity (whole economy)	0,1	0,3	0,5		
Hours worked					
Hourly wages					
Current account balance (4)	-2,0	-0,1	2,7		
General government balance (4)	-3,6	-3,3	-1,8		
Primary general government net lending (4)	-1	1,4	2,2		
Cyclically adjusted general government net lending (3)		-1,7	-1		
ECB refinancing rate (1)	2,5	0,6	0,3		
Federal funds rate (1)	2,6	0,2	1,2		
Own country main policy rate (1)(5)					
Consumer prices	1,9	1,5	1,4		
Oil prices (6)	72,3	95,5	60,2		

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: 16. October 2015.

Appendix I

Table 15b: Prometeia (Italy), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

A comprehensive reform was just approved (June) and no more major issues are left

Goods market:

Several areas in the service sector can be further liberalised

Pension system and retirement

The pension system is already in its long-term equilibrium

The public sector

The main issue is on productivity in the public sector: a reform is under discussion in the Parliament, but the outcome is not clear yet

Other?

2) How much have you revised your estimate of potential output in 2020 over the last year?
Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

As far as Italy is concerned, certainly one of the main obstacles for investment decisions is the lack of aggregate demand

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Only in the long run, because over the short-medium run many economies (Italy among others) are not yet on the technological frontier and so many productivity improvement can be still be achieved exploiting the existing technologies

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Over the next two years the main risk is related to China, Russia and Brasil, whereas in the medium term perhaps ageing in Europe and especially in Germany can be an interesting issue

Appendix I

Table 16a: SKEP (Slovenia), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-09	2010-14	2015-19	2015-24	Comments
Population	2,011	2,054	2,068	2,060	in mio population
Share of people of working age (1)					
GDP, volume	2,4	0,2	2,1	2,1	
GDP volume, per capita	16.908	17.751	18.800		
Private consumption, volume	2,7	-1,0	1,6	1,5	
General government consumption, volume	3,0	-1,0	0,3	1,0	
Gross fixed-capital formation, volume	2,1	-4,4	1,3	1,5	
Domestic demand (incl. Stockbuilding), volume					
Exports, goods and services, volume	5,3	5,3	4,0	3,5	
Imports, goods and services, volume	4,3	2,8	3,2	2,9	
Net exports, volume (2)					
Savings rate of households (period average)			13,5	14,0	
Unemployment rate in percent (period average)	5,5	8,8	7,7	6,5	
Output gap (3)	2,8	-3,7	-2,0	-0,5	
Structural GDP, volume					
GDP, volume:					
European union					
Euro area					
United States					
World					
Productivity (whole economy)					
Hours worked					
Hourly wages					
Current account balance (4)	-2,3	3,7	5,0	3,0	
General government balance (4)	-2,0	-7,3	-3,0	-2,8	
Primary general government net lending (4)	-0,5	-4,8	-1,9		
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)			1,0	2,5	
Federal funds rate (1)			1,5	3,0	
Own country main policy rate (1) (5)					
Consumer prices	3,0	1,6	2,0	2,3	
Oil prices (6)			85	100	

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: October 2015

Appendix I

Table 16b: SKEP (Slovenia), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Reforms towards less segmented labour market, with more flexibility options, especially to increase employment rate of people aged 55+; make transition from education to employment more smooth; reform should go along with modernisation of education in the field of life long learning.

Goods market:

Reforms to: remove obstacles for entries to the market (less regulation); enable firm growth from micro to small and medium size; enable also exit of nonviable firms from the markets (and create space for new firms, with higher value added).

Pension system and retirement

Adapt pension system to ageing population - with linking pensions to life expectancy, enable double status (pension and employment)

The public sector

Modernise public wage system (towards more performance oriented); introduce more market based approach to agencies and public funds; improve the efficiency of health sector and education (especially in primary education);

Other?

Improve corporate governance and management of SOEs; Decrease the state ownerships in corporate sector.

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes. Investment per se cannot solve the potential growth problem in EU. We need investments that really generate jobs and growth with proved multiplier effect.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

To certain extent yes; the balance is needed between deleveraging and investment.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Yes. Progres towards productivity frontier is needed to enable sustainable growth. Policies should aim at support technical progress (innovation, R&D, skills, organisation and management);

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Appendix I

Table 17: ESRI (Ireland), questionnaire:

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Strengthen work incentives for women. Due to high cost of childcare. Increase the affordability of childcare.
Reforms to increase the participation rate and attract back talent from abroad.

Goods market:

Reducing barriers to entry could increase competition in this sector

Pension system and retirement

The retirement age may need to be increased to deal with demographic effects. This is a problem not just for Ireland but for all of Europe. In the coming decades the number of people of retirement age will outnumber the workforce and the pension system will simply be unsustainable.
A mandatory pension scheme may be a solution to this.

The public sector

Reforms need to be put in place to reduce costs and increase efficiency in the public service sector. This could free up money for the government to invest in education and health while keeping within the European fiscal rules.

Other?

Increase available funding to SME's and provide more of an incentive for R&D innovation through tax incentives.

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes I would agree. It would appear that investment is strongly driven by future expectations. The future state of the economy and expectations of future profits appear to be the main driving force behind investment. In economies such as Japan, Italy, France and Germany, real investment has lagged behind real GDP growth. This is a strange outcome considering the substantial global monetary easing that has occurred making credit very cheap. This suggests the investors are more concerned about future returns not being adequate enough to justify investing.

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4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Households in Ireland in particular accrued a sizeable amount of debt in the 2000's. Since the crisis there has been continued deleveraging in the economy. This does not seem to be having a significant negative effect on consumption at the moment. We are seeing strong growth in consumption with this set to continue next year. As well as this our initial lead export growth is being overtaken by domestic demand led growth and so we do not foresee deleveraging having a significantly negative impact on our medium term outlook.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Recent research* has shown that TFP growth in Europe has declined in each decade since the 1970's with this set to continue into the near future. TFP has average 0.2 percent per year in the Euro area from 2000-2013. Obviously this has negative consequences for the growth outlook in Europe in the future and unless serious structural reforms are implemented then high growth will be very difficult.

* Europe's Long-Term Growth Prospects: With and Without Structural Reforms Kieran McQuinn and Karl Whelan

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

The main risk at the moment appears to be coming from China. They are experiencing a slowdown from the huge investment led growth of the past and attempting to transition into domestic led growth. From Ireland's point of view this could affect our exports if the slowdown spread to other countries such as the UK or the US. This could directly impact Ireland's exports and compromise our current recovery.

Appendix I

Table 18a: Kopint-Tárki (Hungary), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population			-0,2	-0,2	
Share of people of working age (1) (15-64 years)			71,0	74,0	
GDP, volume			2,6	2,5	
GDP volume, per capita			2,8	2,7	
Private consumption, volume			2,6	2,3	
General government consumption, volume					
Gross fixed-capital formation, volume			2,9	5,0	
Domestic demand (incl. Stockbuilding), volume			2,1	2,4	
Exports, goods and services, volume			6,7	5,4	
Imports, goods and services, volume			6,5	5,6	
Net exports, volume (2)			0,6	0,2	
Savings rate of households (period average)			10,0	7,0	
Unemployment rate in percent (period average)			6,3	5,6	
Output gap (3)					
Structural GDP, volume					
GDP, volume:					
European union					
Euro area					
United States					
World					
Productivity (whole economy)					
Hours worked			1,0	0,7	
Hourly wages			4,6	5,3	
Current account balance (4)			4,6	3,5	
General government balance (4)			-2,3	-2,3	
Primary general government net lending (4)					
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1)(5)			2,0	3,0	
Consumer prices			2,2	2,8	
Oil prices (6)					

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 2. October 2015

Appendix I

Table 18b: Kopint-Tárki (Hungary), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

While the labour market trends are favourable at the moment, and the unemployment rate has slipped below 7%, this is, in large part, a result of the massive public works program, which is - at its present form - not really conducive to a reintegration of the public workers to the "normal" labour market. The employment rate is still stands at 65% for the age group of 15-64, well below the EU average. Since the labour code is distinctly employer-friendly, the labour market problems cannot be solved by further liberalization. In fact, despite the low overall employment rate, a palpable shortage of properly qualified workers can be observed in several occupations, due to the emigration of workers into other countries with better wage prospects on the one hand, and due to the lack of necessary skills on the other, a result of the problems in education. Instead of further liberalization, the drastic strengthening and recapitalizing of the education sector, the reshuffling of the public works program (to make it less punitive and more integrative), and more family-friendly labor policies (e.g. a network of free nurseries/kindergartens, legislation for mother-friendly workplaces) are needed.

Goods market:

Pension system and retirement

In the short term, the financing of the pension system seems to be ensured. In the long run, however, the unfavourable demographic trends will pose a grave challenge to the pension system, threatening with a drastic fall in the real value of future pensions. The government attaches tax incentives to long term savings, but only a minority of the population is able to build up substantial savings. The solution to this problem is outside the pension system: a combination of the acceleration of productivity growth and a well-managed immigration policy might give a chance to maintain the real value of future pensions, neither of which is on the horizon at present.

The public sector

The fiscal deficit has been below the Maastricht threshold for a while, and the short-term fiscal outlook looks stable. But in the long run, the sustainability of the low deficit is questionable, since the low deficit was achieved in great part by the bleeding out of the education and health care sectors which are becoming more and more dysfunctional and personnel-strapped. The necessary recapitalization of these sectors might endanger the present favourable fiscal situation, and that may raise the need to offset it by a significant reduction of corruption and a reform of the state apparatus itself.

Other?

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2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

Yes, I agree.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

No.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Yes, I agree.

6) How do you assess the risks of secular stagnation in the euro area?

0-10 pct.

11-25 pct.

26-75 pct.

76-90 pct.

91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

Yes

No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Medium-term consequences of the continuation of loose monetary policy. Consequences of low oil prices on investments in the oil manufacturing and in general.

Appendix I

Table 19: IfW (Germany), forecast.

Numbers are in average annual growth rate in per cent unless otherwise state

	2005-10	2010-15	2015-20	2015-25	Comments
Population	-0,2	0,2	0,3		
Share of people of working age (1)	77	77	76		
GDP, volume	1,5	1,6	1,9		
GDP volume, per capita					
Private consumption, volume	0,9	1,2	2,3		
General government consumption, volume	0,6	1,1	1,6		
Gross fixed-capital formation, volume	1,9	2,4	2,3		
Domestic demand (incl. Stockbuilding), volume					
Exports, goods and services, volume	4,7	4,7	6,0		
Imports, goods and services, volume	4,6	4,0	7,1		
Net exports, volume (2)					
Savings rate of households (period average)					
Unemployment rate in percent (period average)	8,0	5,2	3,4		ILO definition. BA: 5,4
Output gap (3)	-0,4	-0,2	1,5		
Structural GDP, volume	1,1	1,2	1,4		
GDP, volume:					
European union					
Euro area			2,0		
United States			2,6		
World			3,5		
Productivity (whole economy)	0,6	0,5	0,7		
Hours worked	-0,4	0,0	-0,1		
Hourly wages					
Current account balance (4)					
General government balance (4)					
Primary general government net lending (4)					
Cyclically adjusted general government net lending (3)					
ECB refinancing rate (1)					
Federal funds rate (1)					
Own country main policy rate (1) (5)					
Consumer prices	1,6	1,3	2,0		
Oil prices (6)			67		

- Notes:
- (1) In percent, period average
 - (2) Change in percent of GDP previous year, period average
 - (3) In percent of potential GDP, period average
 - (4) In percent of GDP, period average
 - (5) If not euro area country
 - (6) Level in 2020 and 2020-2025

Date of forecast: September 2015.

Appendix I

Table 20a: DOR (Denmark), forecast.

Numbers are in average annual growth rate in per cent unless otherwise stated

	2005-10	2010-15	2015-20	2015-25	Comments
Population	0,5	0,4	0,4	0,4	
Share of people of working age (1)	66,0	64,9	64,1	63,5	Ages 15-64
GDP, volume	0,0	0,5	2,3	2,1	
GDP volume, per capita	-0,4	0,1	1,9	1,7	
Private consumption, volume	0,5	0,7	2,6	2,6	
General government consumption, volume	2,3	-0,2	0,9	1,0	
Gross fixed-capital formation, volume	-2,6	1,3	6,1	4,4	
Domestic demand (incl. Stockbuilding), volume	0,2	0,6	2,9	2,6	
Exports, goods and services, volume	1,6	2,1	4,4	4,5	
Imports, goods and services, volume	2,2	2,4	5,6	5,4	
Net exports, volume (2)	0,2	0,4	-0,1	-0,2	
Savings rate of households (period average)	8,7	13,2	12,4	10,6	
Unemployment rate in percent (period average)	3,5	4,0	3,3	2,9	
Output gap (3)	0,7	-3,7	-2,0	-1,1	
Structural GDP, volume	1,2	0,6	1,7	1,8	
GDP, volume:					
European union					
Euro area	0,8	0,6	2,0	1,9	
United States	0,8	2,0	2,9	2,7	
World					
Productivity (whole economy)	0,5	0,2	0,9	1,1	
Hours worked	-0,5	0,4	1,4	1,1	
Hourly wages	3,4	1,8	2,8	3,0	
Current account balance (4)	3,4	6,1	5,3	4,6	
General government balance (4)	2,1	-1,8	-1,8	-0,7	
Primary general government net lending (4)	2,7	-1,3	-1,2	-0,1	
Cyclically adjusted general government net lending (3)	0,5	-0,9	-0,1	0,3	
ECB refinancing rate (1)	2,5	0,6	1,2	2,1	
Federal funds rate (1)	2,6	0,3	2,3	2,7	
Own country main policy rate (1)(5)					
Consumer prices	2,1	1,5	2,0	1,8	
Oil prices (6)	80,1	56,0	75,0	91,0	

Notes: (1) In percent, period average
(2) Change in percent of GDP previous year, period average
(3) In percent of potential GDP, period average
(4) In percent of GDP, period average
(5) If not euro area country
(6) Level in 2020 and 2020-2025

Date of forecast: 23. September 2015.

Appendix I

Table 20b: DOR (Denmark), questionnaire.

1) What needs for economic reform do you see in your country in the following areas

Labour market:

Denmark has conducted a number of labour markets reforms recent years, not least the reduction of the benefit period from 4 to 2 years (with some caveats) and increased requirements to job search for unemployed people. This has reduced structural unemployment a lot. Arguably, the main remaining problem is to increase labour force participation for some groups. In addition, Denmark has done well regarding integration of immigrants in the labour market.

Goods market:

Denmark appears to have a productivity problem in the service sector. Reforms that increase competition and decrease regulation in certain areas are welcome. For example the sales of pharmaceutical products and taxi permits are heavily regulated.

Pension system and retirement

Denmark has tightened conditions for early retirement significantly and linked future statutory retirement ages to expected life time. Thus the main reforms needed has been conducted - and consequently Danish fiscal policy is now assessed to be sustainable. An important problem that should be dealt with is that composite marginal tax rates of pension saving are very high for some groups.

The public sector

Danish fiscal policy is sustainable so no major reforms are strictly needed.

Other?

The Danish housing market lacks automatic stabilizers. The taxation of properties should follow the market price. Furthermore, the prevalence of adjustable rate mortgages, high gross debt levels and the fixed exchange rate is a risky combination. Though, households have sizeable positive net wealth.

2) How much have you revised your estimate of potential output in 2020 over the last year?

Indicate the revision in percentage points.

Appendix I

3) Recently, consensus has emerged between international institutions that weak investments in advanced economies is caused by a poor economic outlook rather than the other way round. Do you agree?

We tend to share this view.

4) Do you think that continued deleveraging efforts by the private sector will constrain the medium-run outlook?

Yes, but only to some extent. We guess that the lion's share of the needed deleveraging has happened in both Europe and the US.

5) Do you agree that a slowdown in technical progress will constrain future productivity growth in advanced economies?

Not sure. It could be that productivity accounts significantly underestimate the welfare gains from innovation so that, if measured appropriately, there is no productivity slowdown for the recent decades. Whether we will see a slowdown in the future is very difficult to assess. It could be that it becomes increasingly difficult to produce new inventions ("fishing-out") and that this lead to a slowdown.

6) How do you assess the risks of secular stagnation in the euro area?

- 0-10 pct.
- 11-25 pct.
- 26-75 pct.
- 76-90 pct.
- 91-100 pct.

7) Do you think the oil price will be on a permanently lower path due to amongst other things advances in shale gas technology and the Iran nuclear deal?

- Yes
- No

8) Are there any major risks for the outlook over the next five years that you would like to discuss at the AIECE conference?

Is secular stagnation a serious concern?