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Arms Industry Adjustment in Post-Cold War Poland and Slovakia

The Automotive Sector in Poland and Slovakia

What Did the Choices of Transitions Determine 25 Years ago?

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CONTENTS

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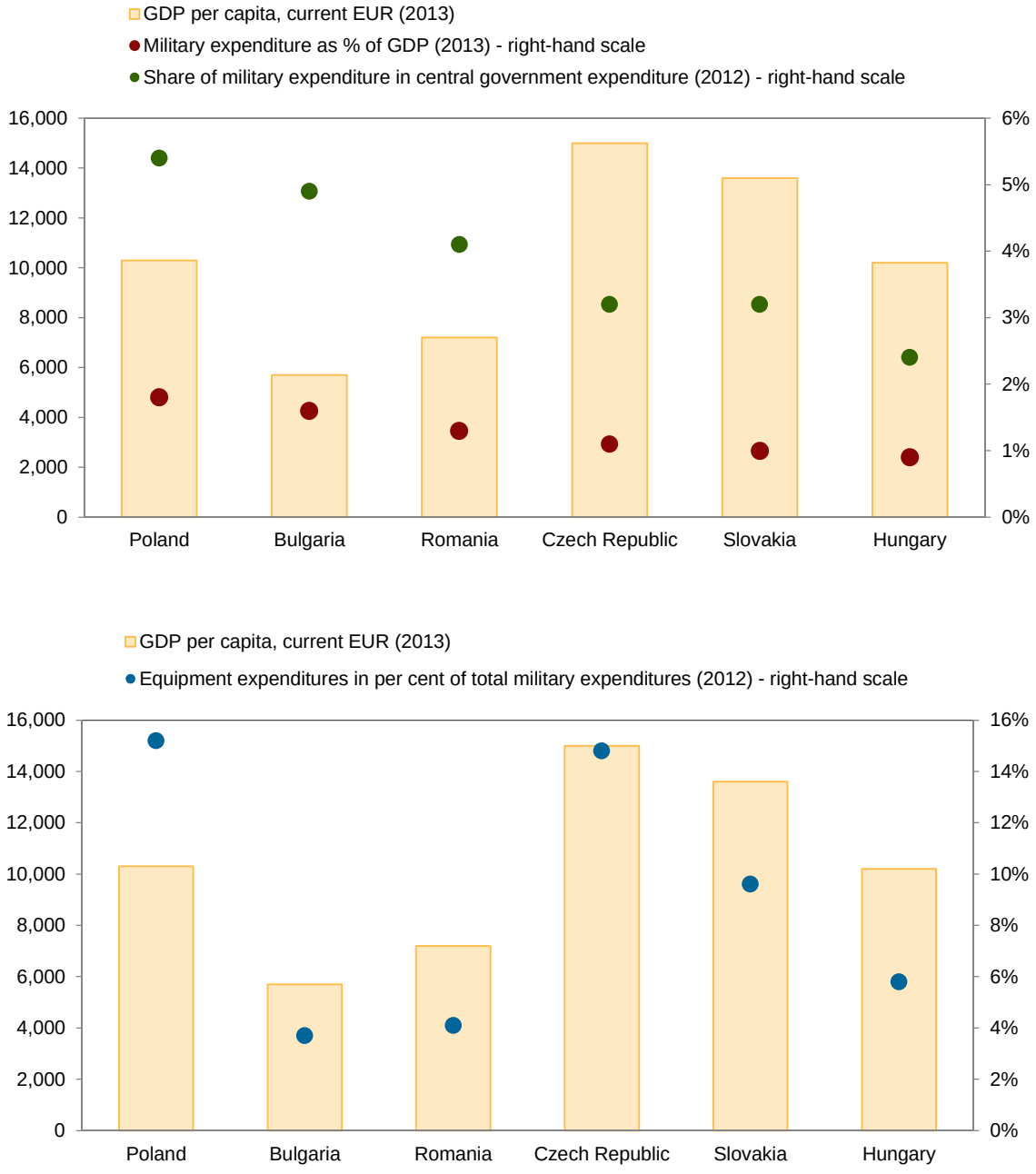

Sources: wiiw Annual Database, World Bank, SIPRI Military Expenditure Database, NATO.

Arms industry adjustment in post-Cold War Poland and Slovakia

BY YUDIT KISS*

THE CHALLENGE OF TRANSFORMATION

Arms production was one of the pillars of the command economies of Central and Eastern Europe (CEE) after WWII. With the collapse of the Warsaw Pact and the COMECON, the region's weapon producers abruptly lost their external markets and the privileged position they have enjoyed in their countries, including solid state backing, generous subsidies and large-scale orders. If they wanted to survive, they had to adapt quickly to their dramatically altered economic, political and social environment. After decades of a bumpy adjustment process, a significantly reduced, more efficient and flexible arms-producing sector emerged that became a more integrated segment of the national economies and international production and trade networks than in the past. Since NATO became the first 'door of entry' through which the region's countries entered into a new international institutional system, weapons production and military establishments played a key role in the integration process. This provided badly needed political legitimisation and economic resources for the sector and left its trace on post-1989 developments in CEE.

These profound changes took various forms and reached different depths in the region's countries. Once the presumed uniformity of the former Eastern bloc broke apart, the historical, political, social and cultural differences among the neighbouring countries became visible. The way arms production has changed during the hectic years of the transformation mirrored the shifts taking place in the economic and political system of each country. Poland and Slovakia represent two different paths of defence industrial adjustment.

POLAND

After the political turnover, Poland introduced a radical shock therapy to accelerate the transition to a full-fledged market economy, but arms making remained a sheltered island protected by the state. Weapon-producing firms remained state-owned and state agencies used both direct and indirect methods – subsidies, debt forgiveness, special credits, orders and various other forms of assistance, including active export promotion – to protect and bolster them. In the mid-1980s the Polish arms industry consisted of approximately 150 plants employing about 250,000 people; by 2004 the workforce fell to an estimated 35,000 and has since remained at that level. Between 1988 and 1995 the volume of military production fell by 80% and its share in overall industrial output dropped from 2.1% in 1986 to 0.4% by 1997.[1] Several large-scale, state-financed projects were launched to revive arms production,

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1 Findings and data are based on Yudit Kiss, *Arms industry transformation and integration. The choices of East Central Europe*, Oxford University Press/SIPRI, 2014.

but the decline continued and by the early 2000s the sector was still in very poor shape. The bulk of the firms were inefficient, continued accumulating losses and failed to lead the country's export expansion as decision-makers had expected. Nevertheless, they escaped bankruptcy thanks to continuous state protection, unlike their civilian counterparts that were decimated.

In 2002 the government launched a new project to shake up the arms industry. The key targets were intensive export promotion in conjunction with Poland's foreign military missions and modernisation of the national armed forces linked with the restructuring of domestic weapons production. Two capital groups led by state-owned holding companies were established to accomplish these goals. One was made up of the united aircraft and electronics producers, under the control of ARP, a state-owned development agency; the other included ammunition, rocket and tank manufacturers and was put under the control of PHZ Bumar, a foreign trade company. ARP acted as a classic crisis manager and proved to be rather efficient in revamping ailing SOEs, putting them on a solid development track and eventually selling them. The Bumar group's results in company restructuring and improving efficiency were far less convincing; it was more successful in accumulating assets and securing political backing to build a business empire.

By the end of the decade most major military manufacturers merged into the Bumar Group, and in 2013 one mega-holding, Polish Arms Group, united all arms-producing companies. The purpose of such a high level of concentration was to improve efficiency and increase Poland's competitiveness on the international weapons' markets, even though the series of mergers that had been taking place in the sector previously had not brought the desired improvements of performance, i.e. increased foreign sales or efficiency gains. After the 2003-2004 arms export boom, related to the country's participation in the US-led Iraqi and Afghan military missions, foreign sales had slowed down and reached about 20% of the military output by the late 2000s (instead of the projected 50%).

The majority of arms-makers remained state-owned, but from the early 2000s several flagship companies were bought by major multinational corporations in the process of building their global supply chains. The decade also saw the emergence of private arms-producing SMEs. These home-grown, efficient and flexible start-ups dominated the high-end of the sector: military electronics, logistics and personal equipment production, and had no problem finding foreign markets. Initially marginalised, they became gradually accepted by the authorities and were included in state-managed offset contracts and export offers.

Poland has been one of the few NATO members that fulfilled the Alliance's obligatory quota spending of 1.95% of its GDP on defence. Robust economic growth since the mid-1990s meant a significant budget for the military, in principle with an increasing share scheduled for development, but due to poor management, a large amount of these resources were inefficiently spent. After a first period of import substitution policy, since 2003 – when Poland bought 48 F-16 combat aircrafts from the United States – a large part of the big-ticket purchases for the modernisation of the national armed forces have come from foreign suppliers. 'Polonisation', the obligatory participation of Polish partners in the manufacturing and delivery of the imported weapons, is expected to compensate for this policy. Since the late 1990s Poland has also introduced an active offset policy to associate large-scale weapons purchases with high-tech technology transfers and increased FDI, with mixed results. Following some budget cuts in the late 2000s, when growth slowed down in Poland as well, from 2012 defence expenditure has been rising again, unlike in most EU member countries, providing funds for new weapons imports and further

support for the domestic arms industry. In late 2012 the Ministry of Defence announced a new ten-year Technical Modernisation Programme worth PLN 131 billion (EUR 31 billion) aiming to modernise the armed forces' weaponry.

SLOVAKIA

Despite several changes of government and countless internal reshuffles of cabinets, the protection and promotion of arms production has been a constant element of politically rather different governments in Poland. In Slovakia, by contrast, government changes brought sharp turns in major policy guidelines, including the treatment of arms industry.

Before 1990, traditional heavy weapons production was one of the pillars of the Czechoslovak economy. At its peak, in 1987, the 111 arms-making plants directly employed about 75,000 people (and nearly as many indirectly) and provided approximately 3% of the country's GDP and more than 11% of its industrial output. Large-scale state-owned conglomerates dominated the sector and their regional concentration was high, with the bulk of heavy weaponry producers located in Slovakia. Some regions, such as the 'Slovak military triangle' formed by the towns of Martin, Dubnica and Detva, were entirely dependent on arms making. After the 1989 Velvet Revolution, President Vaclav Havel advocated a radical halt of arms production and sales on moral grounds. The government launched a large-scale conversion initiative; state agencies actively participated in promoting and financing industrial conversion and alternative regional development projects. From 1992-93 a silent turnaround took place, based on principally commercial arguments; conversion policies were rapidly dismantled and replaced by arms sales promotion. Despite this change, the escalating problems of weapons producers that resulted in heavy job losses and a series of bankruptcies particularly in the centre-north of Slovakia became one of the key issues that led to the break-up of the Czechoslovak Federation.

After gaining independence, Slovakia's new government led by Vladimír Mečiar launched a large-scale project to resurrect the ailing arms industry. It resumed regular financial subsidies, promoted exports and, in 1995, assisted in setting up an umbrella organisation, the DMD Group, to unite and promote the key weapon factories. The coupon privatisation programme launched in Czechoslovakia in the 1990s was halted and by 1997 all arms industry enterprises that had not been privatised previously became 100% state-owned shareholder companies. Most arms producers were included in a large-scale 'revitalisation project' intended to stabilise the finances of key state-owned companies. The second Mečiar government sold some of these firms to businesses close to the governing elite.

In 1998, after a thorough revision of the industry, the Dzurinda government decided to stop the unconditional backing of a sector with such deep structural problems and weak development potential and to modernise the armed forces with principally imported weaponry. Arms making was to prove its viability under free market conditions, even though a few specialised niche functions and products with good export prospects received some targeted financial resources from the state. By the end of 2000 the government lifted the ban on privatisation of strategic companies and by 2002 the bulk of defence-related firms were sold to private bidders. In 2005 the Slovak arms industry produced approximately one tenth of its 1988 peak output and employed 776 people. Several companies, including former strongholds of traditional arms making, closed down or split into smaller successor companies. There were a few joint ventures, and since the mid-2000s a handful of new private military-related SMEs

providing high-tech specialised products have also appeared. An emerging domestic business empire, Sitno Holding (headed by a former Minister of Economy) purchased several surviving traditional weapons-producing facilities with the aim of creating a defence-related cluster.

The impressive growth that followed economic stabilisation and Slovakia's entry into the EU and NATO offered new opportunities both for genuine conversion and for a partial resurrection of arms production. Robert Fico's coalition government (from 2006) placed increased emphasis on arms exports, hoping to link foreign procurement deals with domestic production and military-related R&D. In the midst of the unfolding economic crisis the Radicova cabinet kept defence expenditures at a low level and refused to provide additional resources for weapon's production. Fico's political come-back promised renewed promotion of arms industry and sales, in several cases in cooperation with Czech business partners.

COMPARISON

Four major factors shaped the post-Cold War defence industrial adjustment processes in CEE: foreign policy, the state of the economy, defence industrial policy and the heritage of the Warsaw Pact. The timing of accession to NATO (Poland 1999, Slovakia 2004) and to the European Union (2004) was also a key factor.

Poland followed a pro-active foreign policy and its international ambitions had a direct impact on the development of its arms industry. Thanks to its 'privileged strategic partnership' with the United States, the country has benefited from important defence-related orders, cooperation and offset deals in conjunction with US-led foreign military missions. It has also played an important role as an emerging regional leader in Europe, particularly in Ukraine and the Baltic republics. (The country has recently declared its readiness to supply arms to the present Ukrainian government.)

The state remained the majority owner of the bulk of defence companies and its policy guidelines and financial contributions continued shaping developments in the sector. Poland has dedicated significant resources to preserving an integrated arms industry, dominated by a single player that is expected to be competitive on the global arms market and play a key role in modernising the army's equipment. Despite numerous bankruptcies and a massive reduction of the workforce, the industrial heritage of the Warsaw Pact, the core defence-related companies, the sectoral structure and the geographical distribution of the productive assets have not been altered fundamentally.

After gaining its independence, during the Mečiar era, Slovakia followed a markedly nationalist policy with a protectionist economic model. The stabilisation of the arms industry was state-led and inward-oriented. After 1998 the country's new international integration became a priority and an outward-oriented, liberal defence industrial policy was introduced. It abandoned the idea of salvaging the traditional arms industry by all means and concentrated on a selective industrial promotion and on the modernisation of the armed forces through imports. The Cold War patterns were radically altered; arms production lost its special, privileged position in the system and alternative economic activities – among others, car making – took its place, making possible the rehabilitation of such mono-cultural regions as the former Slovak military triangle. By the time defence industrial policy bounced back to a more interventionist and nationalistic path, these changes had become irreversible.

CONCLUSIONS

The Polish and Slovak experiences suggest that arms industry promotion is an inadequate tool for crisis management. During the worst years of the transition crisis, when weapons production produced major losses and its output dropped to historical lows, both countries strived to protect and revive it, hoping it would become an engine of recovery. From the late 1990s Slovakia changed policy guidelines and opted for a limited, selective promotion policy, leaving for the bulk of the industry the choice of radical restructuring or exit. Economic recovery took place without the contribution of arms making. Poland continued to shelter and promote its large, diversified arms industry, even though the latter did not become a key contributor to export-led economic recovery. The sector has some outstanding companies and products, but these results appear to be modest considering the amount of resources spent on its protection, reorganisation and promotion during the last decades.

The case of Slovakia also shows that path dependency is not an insurmountable fatality; a balanced mix of state industrial policy and free market competition is able to modify deep-rooted economic patterns.

Poland's automotive sector: and yet it moves …

BY LEON PODKAMINER

In contrast to its main regional competitors (from Slovakia, the Czech Republic and Romania), Poland's automotive industry has been systematically reducing the production of personal cars (Table 1).

Table 1 / Production of personal cars (thousand units), 2008-2013

	Poland	Czech Republic	Slovakia	Hungary	Romania
2008	841.7	934.0	575.8	342.5	231.1
2013	475.1	1128.5	975.0	220.9	411.0
2013 (2008 = 100%)	56.0%	120.8%	169.3%	64.5%	177.8%

Source: International Organisation of Motor Vehicle Manufacturers (OICA).

The three producers of personal cars currently active in Poland (Fiat, GM Opel and VW)[2] have large spare capacities. Unless offered additional generous financial 'incentives', they may be considering a more or less permanent downsizing of their production activities.[3] Moreover, having recently invested quite heavily in Hungary, Slovakia, the Czech Republic and Romania, other leading international car producers do not seem to have good reasons to expand into Poland. All in all, it is quite likely that the production of personal cars in Poland will at best stagnate in the near term.

Table 2 / Production of commercial vehicles (thousand units), 2008-2013

		Poland	Czech Republic	Slovakia	Hungary	Romania
Heavy trucks	2008	13.4	3.1	0	3.1	0.3
	2013	0	0.8	0	2.4	0
Heavy buses	2008	4.5	3.5	0	0.6	0
	2013	4.2	3.7	0	0	0
Light comm.	2008	93.0	6.3	0	0	14.0
vehicles	2013	104.1	0	0	0	0

Source: OICA.

Despite the relatively low production of passenger cars, the turnover of Poland's automotive industry (which includes manufacturing of parts and components – excluding tyres, batteries and windows) is quite high. In 2012 it reached EUR 26.6 billion. (For comparison, the Czech automotive industry's

[2] In the first half of 2014 Fiat's output accounted for 55% of the total car production, followed by VW's (30%) and GM Opel's (15%).

[3] The state-owned factory manufacturing Fiat-licensed passenger cars was taken over by Fiat in 1992. The details of the privatisation deal have never been made public. Quite likely Fiat 'received' the factory free of charge. For the next 20 years Fiat enjoyed a 'tax holiday'. Apparently, only in 2012 profit of Fiat Poland was taxed – though at a ridiculously low rate of about 1%. Also, at the end of 2012 Fiat started to massively reduce employment (and production) in its Polish subsidiary. Recently the Ministry of Economy suggested that Fiat was considering a renewed expansion of its activities in Poland. It is rumoured that Fiat has again been offered another nearly permanent 'tax holiday'.

turnover was EUR 33.1 billion, Slovakia's 20.1 billion, Hungary's 16.1 billion and Romania's 9.7 billion.) Poland's relatively high automotive industry's turnover is partly due to the quite large quantities of commercial vehicles it manufactures (Table 2).

Manufacturing of parts and components is even more important for Poland's automotive industry. This is evidenced by the statistics on foreign trade. Thus, in 2013 total exports of the automotive industry (including parts and components, tyres, batteries and windows) reached EUR 24.4 billion. Exports of passenger cars brought EUR 5.2 billion, trucks 2.1 billion, buses 0.9 billion, and trailers 0.6 billion. Exports of parts, components etc. brought EUR 15.5 billion.

Parts and components (broadly defined) appear to have been the most dynamic segment of the exports of the *transport equipment and parts and accessories thereof* branch of manufacturing[4] (Table 3).

Table 3 / Polish exports of transport equipment and parts and accessories thereof, 2013 and first half of 2014 (billion EUR)

	2013	2012 = 100	1-2q 2014	1-2q 2013 = 100
Total	30.6	109.4	15.8	103.9
Passenger cars	5.2	98.1	2.6	95.3
Other means of transport	7.9	113.8	4.1	107.2
Parts and accessories	17.5	111.2	9.1	105.2

Source: Central Statistical Office of Poland.

Interestingly, the *transport equipment and parts and accessories thereof* branch appears to be a net exporter. On all items from Table 3 the value of imports is lower than the value of exports (Table 4).

Table 4 / Polish imports of transport equipment and parts and accessories thereof, 2013 and first half of 2014 (billion EUR)

	2013	2012 = 100	1-2q 2014	1-2q 2013 = 100
Total	20.9	110.0	10.9	104.8
Passenger cars	3.9	101.9	2.3	117.7
Other means of transport	6.5	120.3	3.2	100.0
Parts and accessories	10.4	107.4	5.4	102.8

Source: Central Statistical Office of Poland.

With employment close to 156 thousand (as of 2012), the automotive industry is a rather big employer. Also it has been a sizeable recipient of foreign direct investment. At the end of 2012 the stock of the industry's FDI approached EUR 8 billion (up from 2.2 billion in 2000 and 4.8 billion in 2008). Apart from the three producers of personal cars (Fiat, VW, GM Opel) also major trucks and buses producers are

[4] The *transport equipment and parts and accessories thereof* branch includes automotive industry proper as well as manufacture of other means of transport (rail, maritime, airborne). The automotive exports and imports account for about 5/6 of the respective totals for the *transport equipment* branch.

foreign-owned. VW is the largest (by far) producer of light trucks, followed by MAN. However, Solaris, the second-largest bus producer, is a private domestically owned company.[5]

Foreign producers (Fiat Powertrain, Isuzu, VW and Toyota) dominate the production of motor engines. Renowned foreign producers of other parts and components (also of tyres and windows) active in Poland are too numerous to be listed here.

At the end of 2012 there were some 2,700 firms classified as manufacturers of motor vehicles, trailers and semitrailers and parts and components (excluding manufacturers of tyres, windows and batteries). Some three quarters of them were micro-firms with an employment of less than 9 persons. Of the total 2,700 registered firms some 1,500 were believed to be actually operating. At the end of 2012 there were 32 large firms (with employment of over 1,000 persons), 79 firms (with employment ranging between 250 and 999) and 353 small firms (with employment ranging between 10 and 49). Besides, some 123 medium-sized and large firms classified as manufacturers from other industrial branches (glass, electrical equipment, rubber, etc.) were important suppliers of the automotive industry proper.[6]

Concluding, despite the tendency to lose out to its regional competitors in the production of passenger cars, Poland remains a significant producer of automotive parts and components, buses and other commercial vehicles. In actual fact Poland's position on these segments of the automotive industry has been strengthening. The share of automotive firms active in Poland in the EU's total production of light commercial vehicles stood at 7.4% in 2013 (up from 5.3% in 2008). In the case of heavy buses that share reached 33.7% (up from 11.1% in 2008). Given the fact that the competition on the global market for passenger cars is likely to intensify further, Poland's specialisation in the production of buses, trucks, engines and other components for the automotive industry may prove more advantageous than the one involving simple assembling of passenger cars.

[5] Solaris accounts for about 33% of total bus production. The Number 1 producer is MAN with a 40% share. Volvo's production share is close to 20%.

[6] Source: https://www.kpmg.com/PL/pl/IssuesAndInsights/ArticlesPublications/Documents/mobile/Stan-branzy-motoryzacyjnej-2013.pdf

Key challenges of the Slovak automotive industry

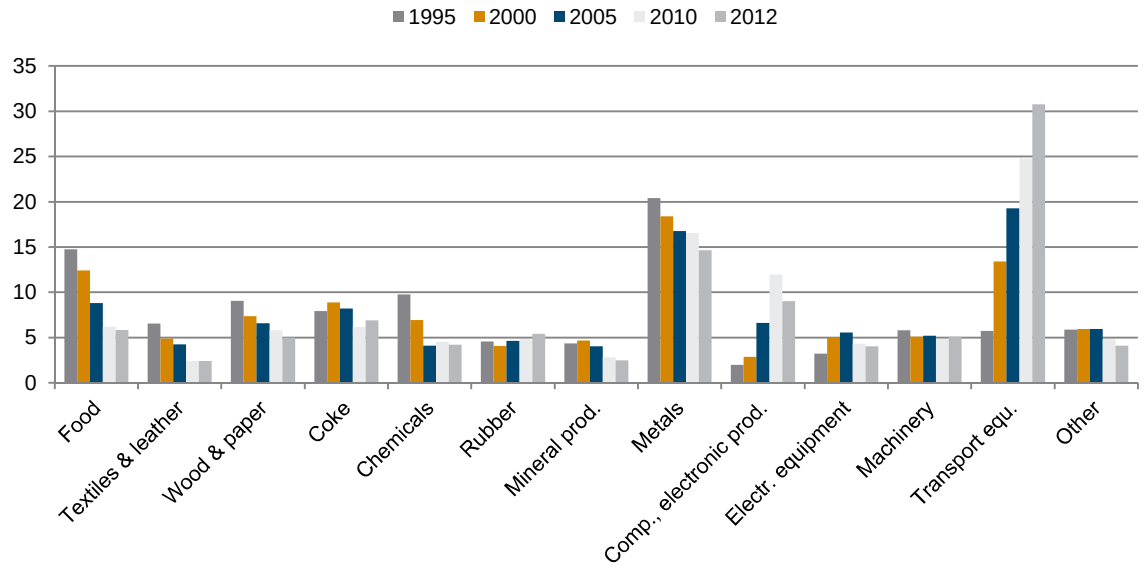
BY DORIS HANZL-WEISS

In the past fifteen years, the Slovak automotive industry has been transformed into a very successful export-oriented industry thanks to the inflow of foreign direct investment. Production of cars has surged recently and Slovakia has become the world leader in per capita car production. Nevertheless, the Slovak automotive industry is currently facing three important challenges: growing specialisation, high import dependence and low R&D expenditures.

GROWING SPECIALISATION

The automotive industry has become the largest sector in Slovak manufacturing; in fact there has been a growing specialisation on the automotive industry during the past ten years: while in 2000 it provided around 13% of manufacturing output, this share rose to 31% by 2012. The second most important sector is that of metals production, accounting for 15% of manufacturing output in 2012, followed by computers and electronic products with about 9%. All other sectors have shares around 5% (see Figure 1).

Figure 1 / Slovakia: Output, manufacturing = 100, NACE Rev. 2



Source: Eurostat, wiiw calculations.

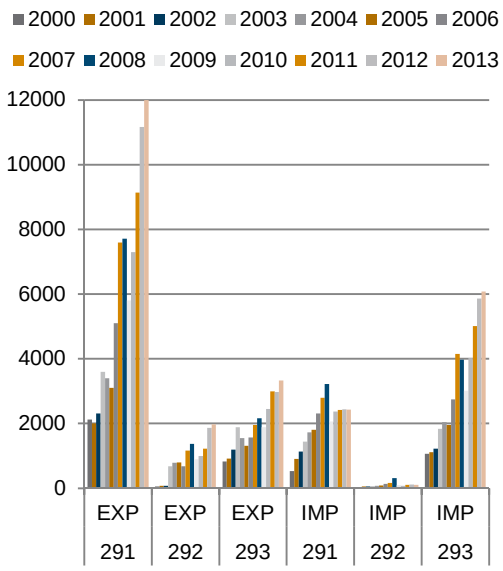
There are three major car manufacturers in Slovakia: Volkswagen Bratislava, PSA Peugeot Citroën and Kia. While Volkswagen has been present in Slovakia since 1991, the other two car companies started

manufacturing in 2006, and car part suppliers have followed in the meantime. Because of the significant share of supplies/intermediates used and the high productivity (due to new technologies, i.e. robots installed), the size of the automotive industry is substantially smaller in terms of value added – though also here a substantial catching-up process can be observed.[7] The share rose from 8% of manufacturing value added in 2000 to 21% in 2012. The metals sector has about the same size as the automotive industry in terms of value added (19%); several other industries have shares between 7% and 8% (food industry, wood & paper, rubber & plastic, machinery, other manufacturing).

HIGH IMPORT INTENSITY

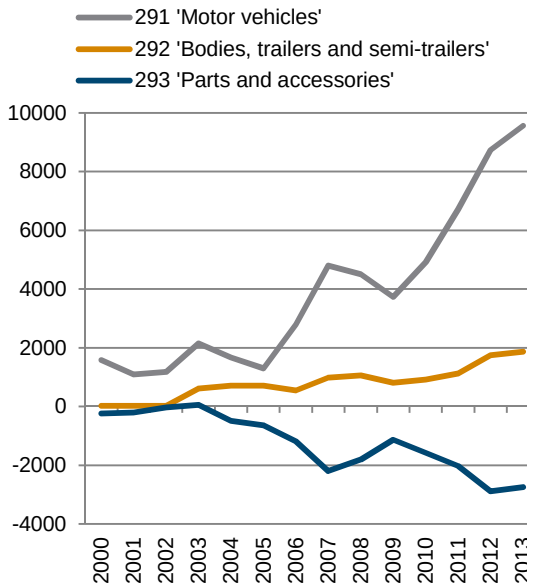
Due to the increase in automotive capacities, exports of the automotive sector surged from EUR 3 billion in 2000 to more than 17 billion in 2013. Exports of motor vehicles (NACE 291) increased by a factor of six during this period, with only a small slump in 2009. At the beginning of 2012 all three main car manufacturers introduced a third shift and the number of cars produced increased by 45% in that year thus contributing to further growing exports. Interestingly, about 29% of total automotive exports go outside the EU-28, thus the Slovak automotive exports have been geographically more diversified than those of the neighbouring countries. On the other hand, together with growing motor vehicles exports, imports of car parts (NACE 293) increased as well. They went up from EUR 1 billion in 2000 to 6 billion in 2013 (see Figure 2). Thus, while Slovakia has a highly positive trade balance for motor vehicles (NACE 291) as well as for bodies, trailers and semi-trailers (NACE 292), the trade balance for car parts (NACE 293) is negative and even widening over time (see Figure 3).

Figure 2 / Slovakia: Automotive exports and imports, million EUR, NACE Rev. 2



Source: Eurostat COMEXT.

Figure 3 / Slovakia: Automotive trade balance, million EUR, NACE Rev. 2



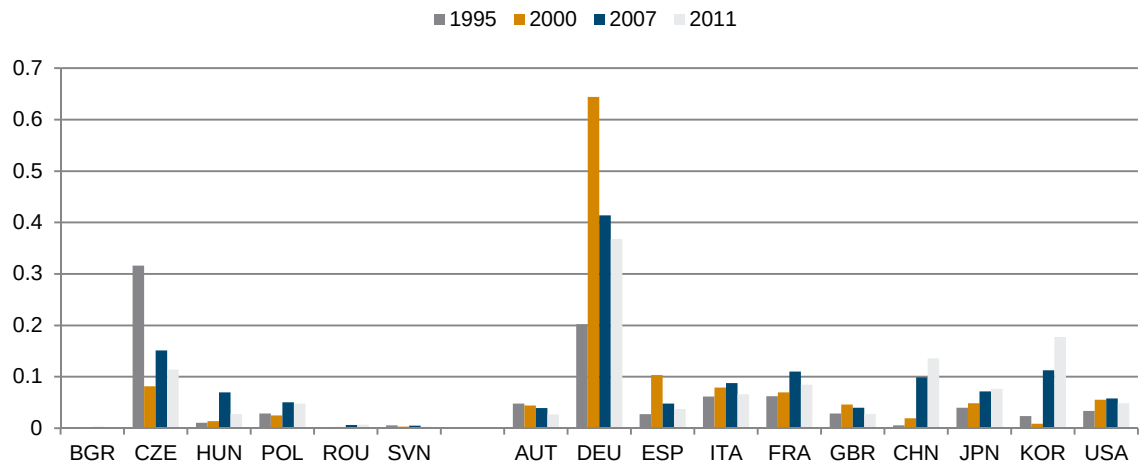
Source: Eurostat COMEXT.

[7] Own calculations based on Eurostat data.

Detailed insight into the characteristics of imports and import intensities of intermediate inputs in the Slovak automotive sector is provided by data from the World Input-Output Database (see www.wiod.org). This allows us to investigate which inputs are sourced domestically besides automotive car parts (e.g. products from the metals sector or the electrical and optical equipment sector) and where they come from. First, we look at direct inputs and thus neglect the second round effects (i. e. indirect effects, meaning that direct imports may again contain parts that are sourced either domestically or from abroad which again use parts from domestic or foreign source, and so on). Of total automotive gross output, intermediate inputs make up 75.6% (accordingly, value added accounts for 24.4%). This comparatively high share is explained by the strong fragmentation of production processes in this sector, the integration with supplier networks of Western Europe and the role of Slovak automotive companies as assemblers of cars. Of these 75.6%, 44.5% are imported intermediates and 31.2% intermediate inputs purchased on the domestic market. On average, the share of imported intermediates in the total is thus roughly 60% (import intensity of intermediate use). Looking at main inputs of the automotive sector in more detail, this import intensity is about average for rubber & plastic products (62%) and for basic metals & fabricated metal products (63%) but higher for transport equipment i. e. car parts (71%), electrical & optical equipment (79%) and machinery (90%). Other inputs from the services sector, on the other hand (wholesale, retail trade, inland transport), are sourced domestically (97-98%), business services are foremost sourced in Slovakia (85%).

When using an indicator for sourcing patterns which also takes into account indirect effects (backward linkages, i. e. defined as the column-elements of the Leontief-inverse), the sourcing structure across countries becomes evident (see Figure 4). Here the origin of foreign direct investment in the automotive sector plays a major role and can explain patterns of backward linkages through the integration into supply chains. Thus, backward linkages with Germany are the largest, followed by those with Korea. Backward linkages with France, on the other hand, are less pronounced. Linkages with the Czech Republic are traditionally strong, ties exist for instance between Hyundai in the Czech Republic and Kia in the Slovak Republic. Interestingly, backward linkages with China have grown recently. They seem to stem from the increase in indirect linkages, as direct linkages are comparatively smaller and here most evident for electrical and optical equipment.

Figure 4 / Slovakia: Backward linkages (transport equipment, NACE Rev. 1, divisions 34&35)



Source: World Input-Output Database (WIOD).

LOW R&D EXPENDITURES

Research and development is still underdeveloped in Slovakia in general and in the automotive industry in particular. In 2013, business enterprise R&D expenditure amounted to 0.38% of the country's GDP. Data for 2012 indicate that about 54% of the total amount was spent in manufacturing, of which 31% was accounted for by the automotive sector. Overall, R&D in the automotive sectors was almost exclusively performed by foreign affiliates. Though large manufacturers usually do their research in their home country, some foreign car parts suppliers have already located R&D in Slovakia (e.g. Johnson Controls, Continental Automotive Systems R&D Center, ZKW Slovakia). More positively, R&D expenditure in the automotive industry doubled between 2009 and 2012 and reached EUR 40 million (for comparison: the respective expenditures amounted to EUR 54 million in Poland and to EUR 80 million in Hungary). Small steps are made: this year, Volkswagen opened a new tool plant in Slovakia as well as a technology centre for production and development of equipment and tools (*Slovak Spectator*, 24 November 2014).

Overall, the future will show whether these challenges will turn into risks. In the meantime, policies try to encourage investment in R&D and to attract further foreign direct investment in general. The US electric car manufacturer Tesla Motors is eyeing for a production location in Europe in the long run – so there is a chance that Slovakia will become a world producer of electric cars in the future as well.

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Opinion corner: What did the choices of transitions determine 25 years ago?

ANSWERED BY WIIW EXPERT VLADIMIR GLIGOROV

There were basically two types of choices: systemic and those of policy. On the systemic part, liberalisation, i.e. the move to the market, and privatisation, i.e. rehabilitation of private ownership, were answers to long-term problems with efficiency and equity that Soviet-type socialist systems (but also the self-management one, only for different reasons) faced and had no way to deal with. This was not primarily an ideological choice. The long debate on state and market from 1921 to 1989 (my review of the debate is in Gligorov, 1984) and the repeated failures of the reforms (since the mid-1960s especially) that aimed to 'perfect' the socialist system, and the inability of the ideologues of the Communist Parties to make an argument for the superiority of the state-socialist over the private-market system, is what led the democratically elected governments to embark on liberalisation and privatisation of the failing and unfair economic system from 1989 onwards. The possible influence of foreign advisers, often credited or blamed as the case may be for the systemic choices, was primarily technical and was, for the most part, not really followed. It is a mistake to attribute these systemic choices to anything else but to the failures of the state-socialist (and self-management) system (on Yugoslav economics see Gligorov, 1998).

The crucial characteristic of the European as opposed to the Asian transitions was that they started with the introduction of democracy, not with market and trade liberalisation (Roland, 2000). So, legitimacy of the systemic and the policy choices was the crucial prerequisite. Again, why was that? Mostly because of the history of failed reforms from 1921 on, which had the aim to substitute the lack of legitimacy of the dictatorship of the Communist Party with partial introduction of price and trade liberalisation and limited private ownership. This strategy has proved successful in China (and arguably in the 1920s in Soviet Russia, but then collectivisation ended the so-called New Economic Policy in 1929-1930), but the scale of liberalisation and privatisation in the Chinese case are unprecedented for a one-party socialist system (even of the self-managed Yugoslav type). It may also be in part a characteristic of the Russian transition, especially after the recovery of the energy prices, which is being tested currently. But these are additional issues.

As for policy choices, some of those were of a shock type, while the others were more gradual. Shock therapy, advocated by Jeffrey Sachs, was primarily a short-term stabilisation policy: fix the exchange rate for a limited period of time to unify the exchange rate and stabilise prices, which have been at least partially liberalised, then move to a flexible exchange rate. He did try to extend the shock, quick solution, approach to privatisation, which went by the name of Big-Bang, but was unsuccessful (Lipton and Sachs, 1990a, 1990b, 1992; Gligorov, 1995). An argument for Big-Bang was also made by Balcerowicz (1993). In addition, Václav Klaus advocated voucher privatisation, and that may be one version of a Big-Bang type of change, but that was mostly for political reasons. Kornai (1990), of course, advocated a gradual method of privatisation and indeed in most cases this is how the process actually proceeded, though not necessarily in the way he advocated it. In any case, the way privatisation was done, in

Russia in particular, but also everywhere else, was mostly driven by political considerations. Foreign advisers were by and large sometimes useful, sometimes not, in both the technical and political sense of that word. One can check that by going through early contributions of well-known economists, some of which are to be found in three volumes edited by Olivier Blanchard with various collaborators (1993, 1994). There is an influential reconsideration by Blanchard (1997), which is written a bit like a post-mortem account, which shows a better understanding of how the socialist system actually worked. There is also the well-known book by Kornai (1992) on the socialist system which deals in detail with the Soviet system and its deficiencies. I actually liked his Economics of Shortage (1980) the most (though the theory of shortage being inherent to the Soviet-type socialist system was already well understood by Novozhilov in 1926).

As a digression, I could mention that the same can be said for the constitution making process in most countries in transition. Most of the constitutions were concocted from past legal history and with borrowings from foreign constitutional practice (the Russian constitution is the prime example), but these choices were politically driven almost everywhere (Gligorov, 1997). Later on, adjustments were made, in a number of cases, to harmonise with the acquis communautaire.

The second wave of systemic and policy choices came with the process of EU accession or with its delay or lack thereof. The accession process, guided by the Copenhagen Criteria, introduced gradual integration with the common market, rule of law, respect for human and minority rights, and the rest. In that, one can argue for the significant influence from the outside, even though, as it is clear, this has not prevented countries from following distinct paths in institutional and policy choices.

What have been the outcomes? Clearly, the socialist (Soviet, communist) political system was such that it rationed goods, labour, welfare, and the positions in the privileged group. That adds to the sense of unfairness and enhances the concern with equality on top of persistent inefficiencies. Given that starting position, there have been three possible outcomes depending on systemic, economic and political, as well as policy choices:

First (the European case, e.g. more generally the Central, East and Southeast European states): democratise and liberalise (eliminate shortages in goods and public offices), and also privatise to increase efficiency and support rule of law.

Second (modified European case, e.g. more specifically the Central European new EU member states): democratise, liberalise, privatise, and socialise some risks (to address the natural and social lottery). This case is also to a significant extent supported by the accession to the European Union with its predominantly social welfare form of liberal democracy.

Third (the Asian case, and the sub-case of Russia and other oligarchies): liberalise, but do not democratise (eliminate shortages in goods, but not in public offices, though the latter may be rationed by corruption), and privatise to support and stabilise the non-democratic system.

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The editors recommend for further reading*

Branko Milanovic on what economists got wrong about Russian transition: http://glineq.blogspot.co.at/2014/12/coase-theorem-and-methodological.html.

Anne Applebaum on who owns Russia: http://www.nybooks.com/articles/archives/2014/dec/18/how-he-and-his-cronies-stole-russia/?insrc=hpma

Ivan Krastev on Russia against globalisation: http://www.eutopiamagazine.eu/en/ivan-krastev/issue/russia%E2%80%99s-revolt-against-globalisation

The Baltic angle: http://www.the-american-interest.com/2014/11/17/putin-targets-the-scandinavians/

Lilia Shevtsova: http://www.the-american-interest.com/2014/12/02/what-should-the-world-fear-the-rise-or-decline-of-illiberal-powers

On oil: http://www.bloomberg.com/news/2014-11-28/opec-refusal-to-pressure-oil-s-weakest-from-iran-to-shale.html

More on oil: http://www.bloomberg.com/news/2014-11-30/oil-slumps-below-65-amid-opec-inaction-to-stem-glut.html

Branko Milanovic on Stiglitz and the difference between capital and wealth in Piketty: http://glineq.blogspot.co.at/2014/12/some-prefer-land-stiglitz-on-income-and.html

Noah Smith on economics and sociology: http://noahpinionblog.blogspot.co.at/2014/12/sociology-vsthe-empire.html

Amartya Sen on Arrow and social choice: http://www.project-syndicate.org/commentary/kenneth-arrow-impossibility-theorem-social-welfare-by-amartya-sen-2014-11

OECD on inequality hurting growth: http://www.oecd.org/els/soc/Focus-Inequality-and-Growth-2014.pdf

Willem Buiter on globalisation stalling: http://willembuiter.com/stall.pdf
and on the threat of secular stagnation: http://willembuiter.com/secstag.pdf

Gorodnichenko, Svejnar and Terrell on FDI and spillover in transition economies: http://cgeg.sipa.columbia.edu/sites/default/files/cgeg/WP%2011%20-%20Svejnar.pdf

Stiglitz on the Chinese century: http://www.vanityfair.com/business/2015/01/china-worlds-largest-economy.print

Albania as the best or second best performing transition country in the last 25 years: http://glineq.blogspot.co.at/2014/11/for-whom-wall-fell-balance-sheet-of.html

* Recommendation is not necessarily endorsement.

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Conventional signs and abbreviations used

%	per cent
LFS	Labour Force Survey
HICP	Harmonized Index of Consumer Prices (for new EU Member States)
PPI	Producer Price Index
M1	Currency outside banks + demand deposits / narrow money (ECB definition)
M2	M1 + quasi-money / intermediate money (ECB definition)
p.a.	per annum
mn	million (10^6)
bn	billion (10^9)

The following national currencies are used:

ALL	Albanian lek	HUF	Hungarian forint	RON	Romanian leu
BAM	Bosnian convertible mark	KZT	Kazakh tenge	RSD	Serbian dinar
BGN	Bulgarian lev	LTL	Lithuanian litas	RUB	Russian rouble
CZK	Czech koruna	MKD	Macedonian denar	UAH	Ukrainian hryvnia
HRK	Croatian kuna	PLN	Polish zloty		

EUR euro – national currency for Montenegro and for the euro-area countries Estonia (from January 2011, euro-fixed before), Latvia (from January 2014, euro-fixed before), Slovakia (from January 2009, euro-fixed before) and Slovenia (from January 2007, euro-fixed before).

Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

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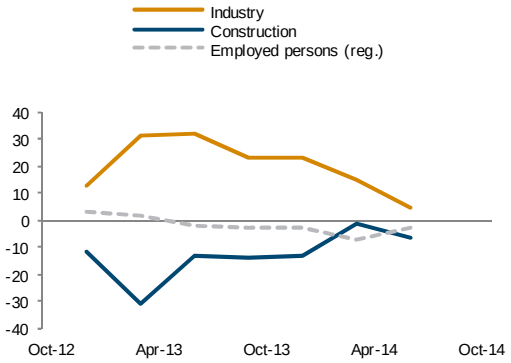
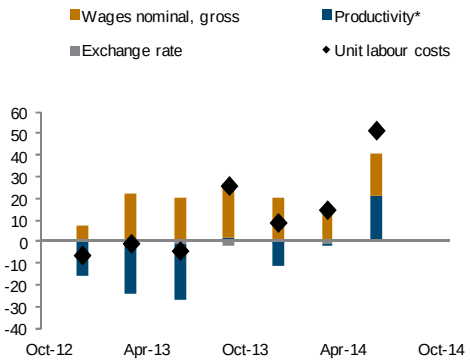
Albania

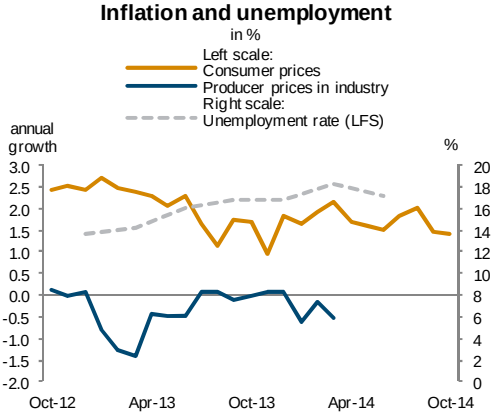
Real sector development
cumulated annual growth rate in %



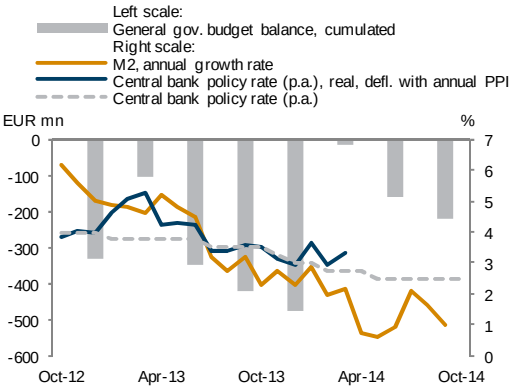
Unit labour costs in industry
annual growth rate in %



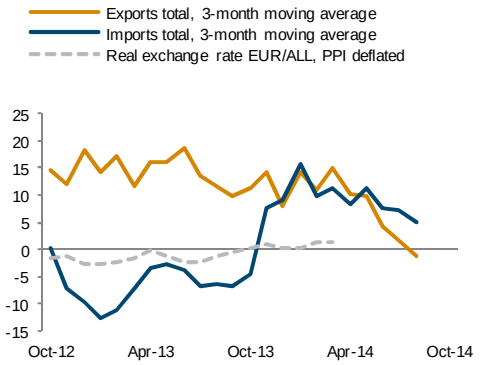
Inflation and unemployment
in %



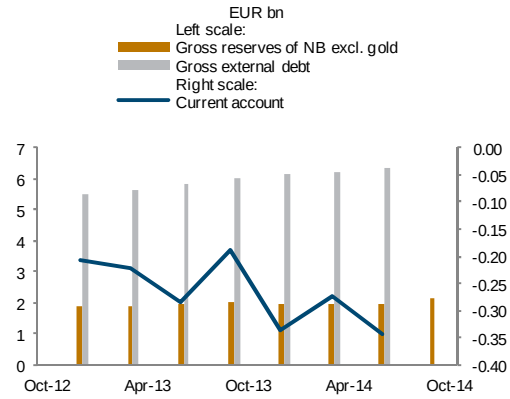
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
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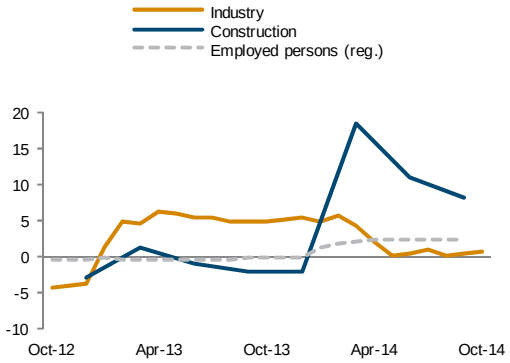
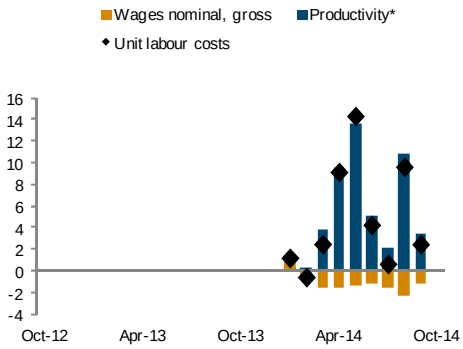
Bosnia and Herzegovina

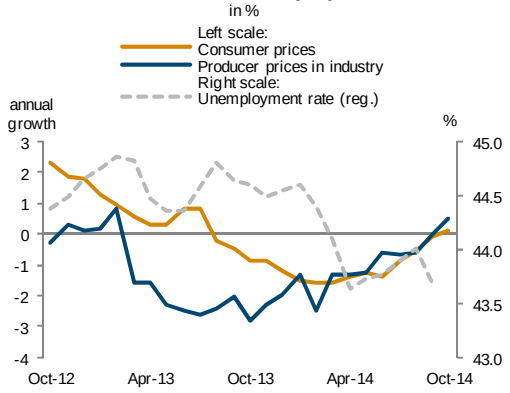
Real sector development
cumulated annual growth rate in %



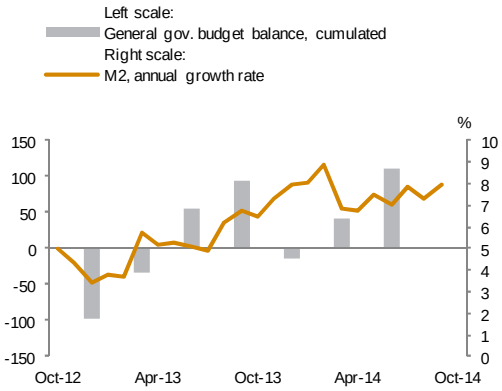
Unit labour costs in industry
annual growth rate in %



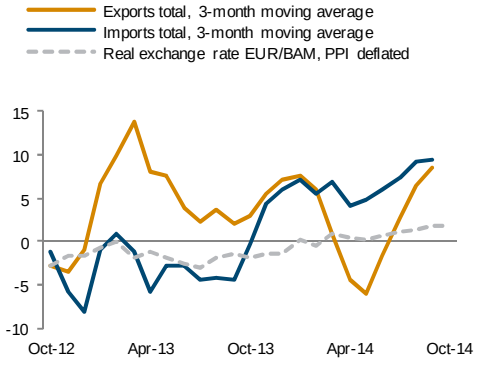
Inflation and unemployment
in %



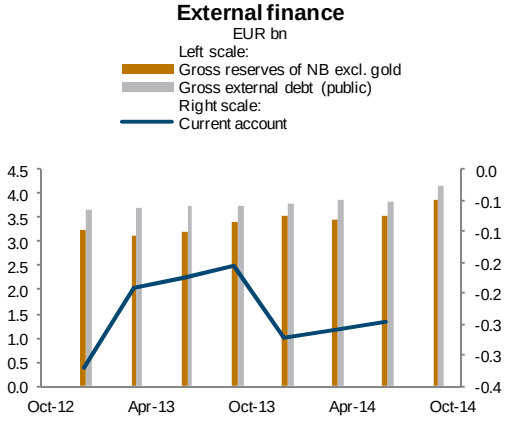
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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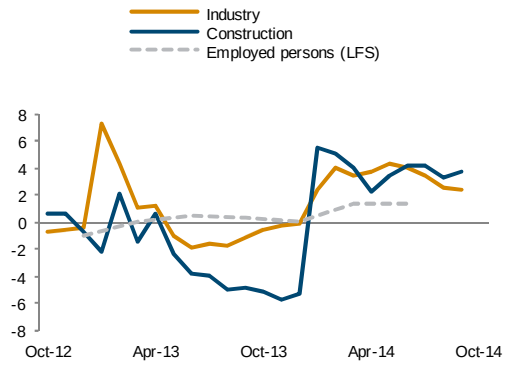
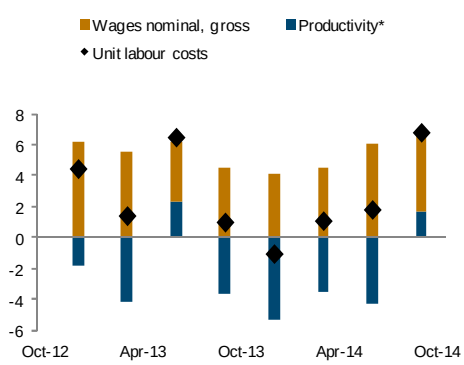
Bulgaria

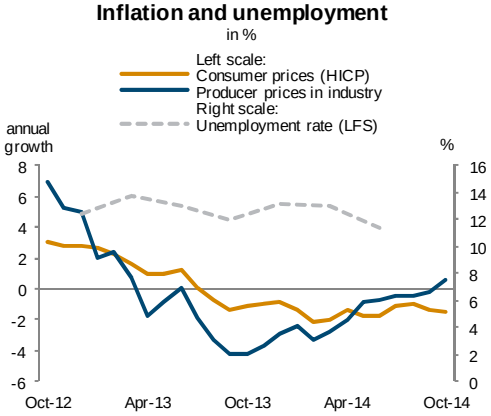
Real sector development
cumulated annual growth rate in %



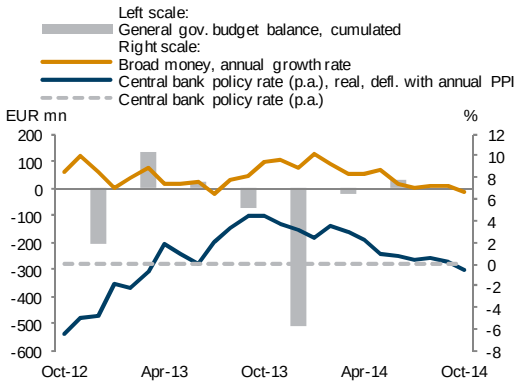
Unit labour costs in industry
annual growth rate in %



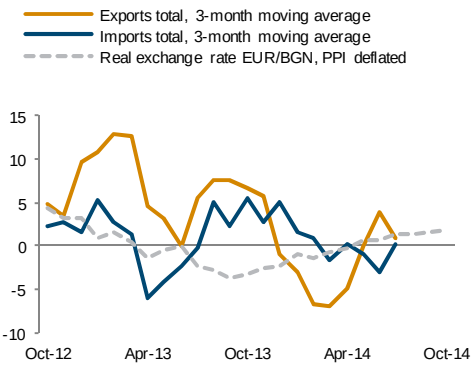
Inflation and unemployment
in %



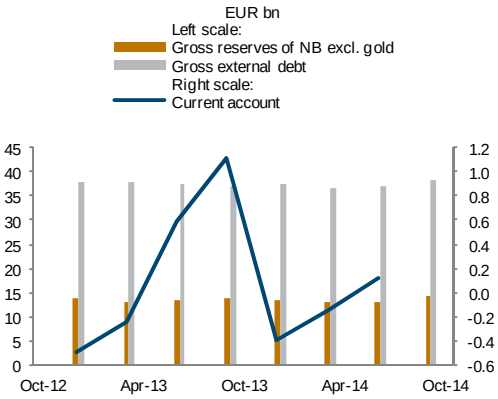
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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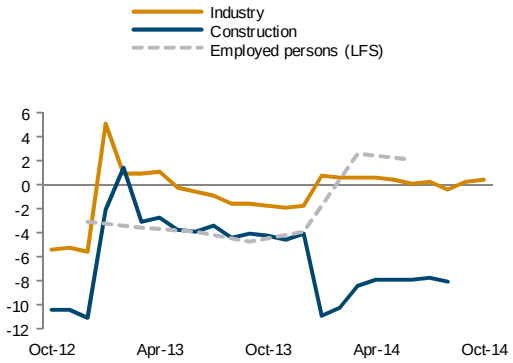
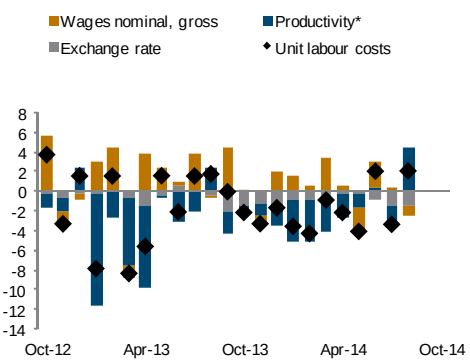
Croatia

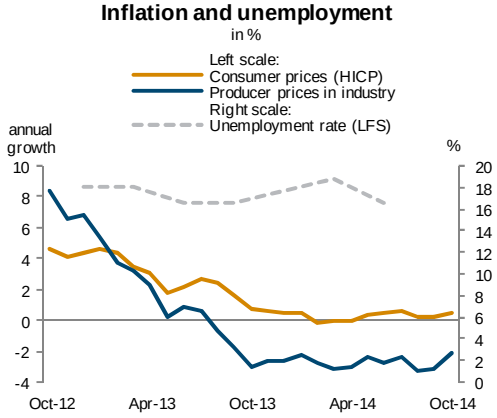
Real sector development
cumulated annual growth rate in %



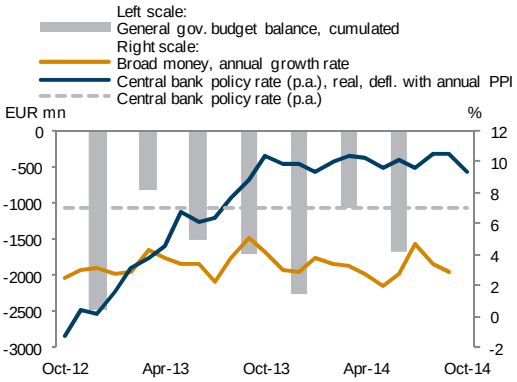
Unit labour costs in industry
annual growth rate in %



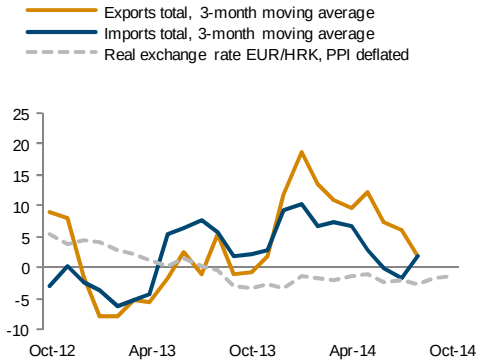
Inflation and unemployment
in %



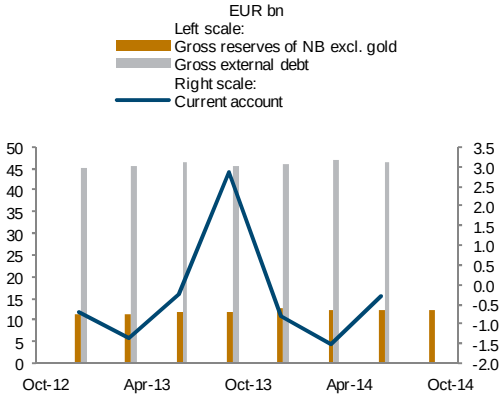
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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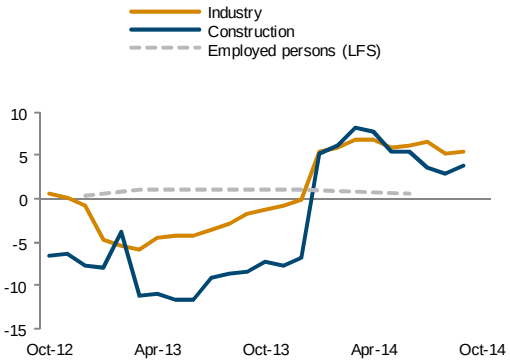
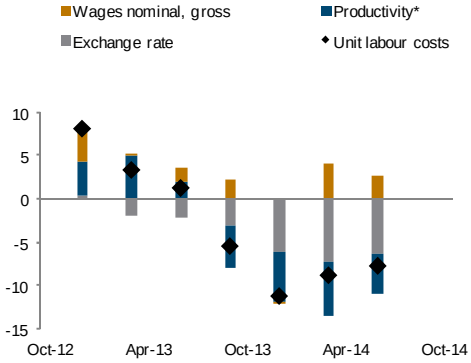
Czech Republic

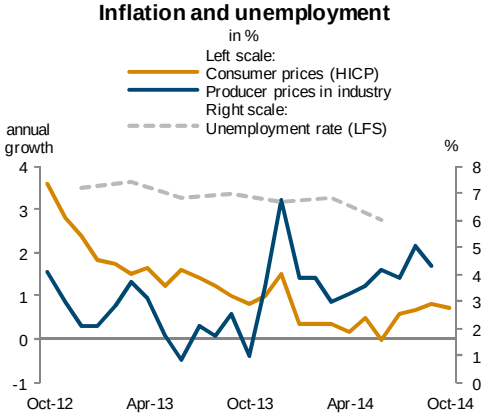
Real sector development
cumulated annual growth rate in %



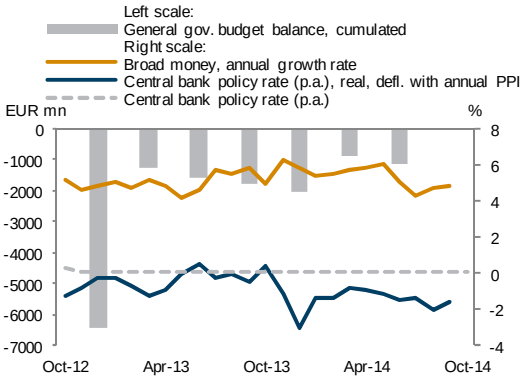
Unit labour costs in industry
annual growth rate in %



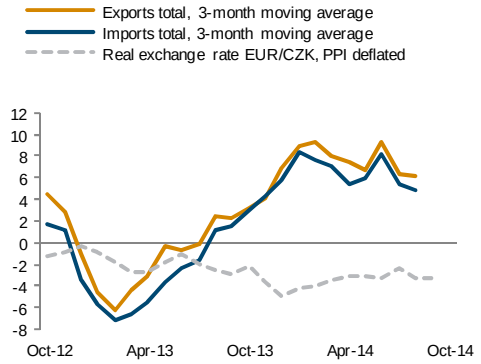
Inflation and unemployment
in %



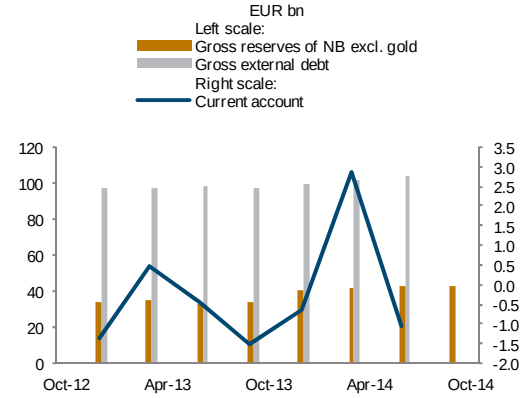
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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Source: wiiw Monthly Database incorporating Eurostat and national statistics.
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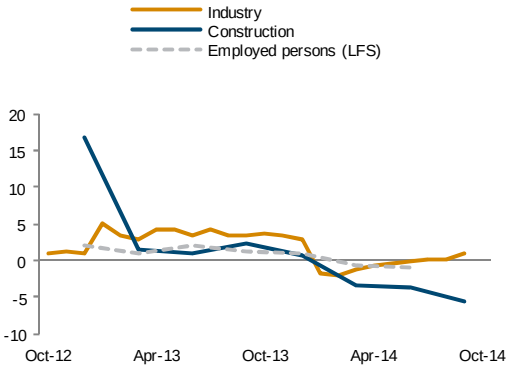
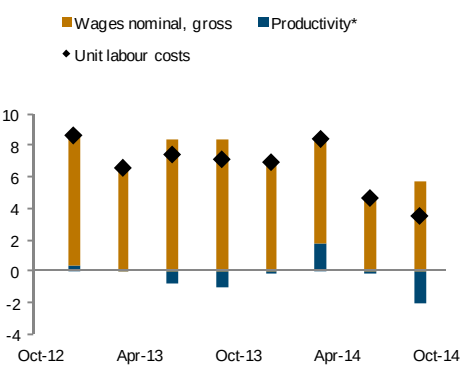
Estonia

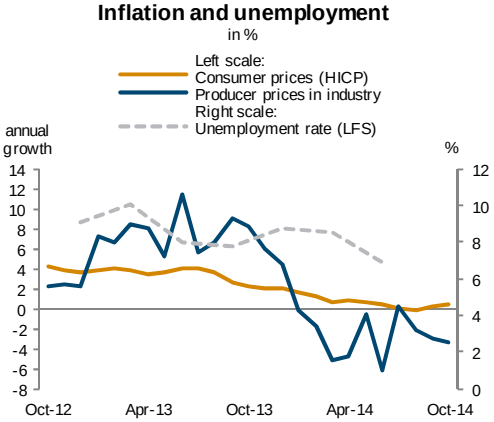
Real sector development
cumulated annual growth rate in %



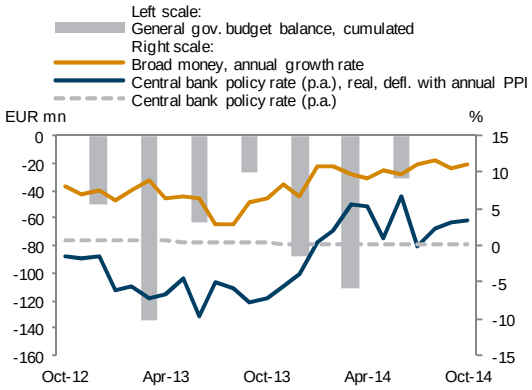
Unit labour costs in industry
annual growth rate in %



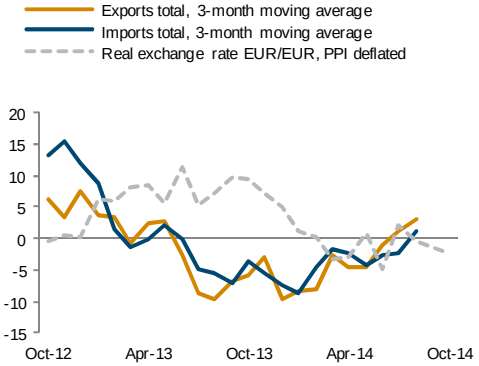
Inflation and unemployment
in %



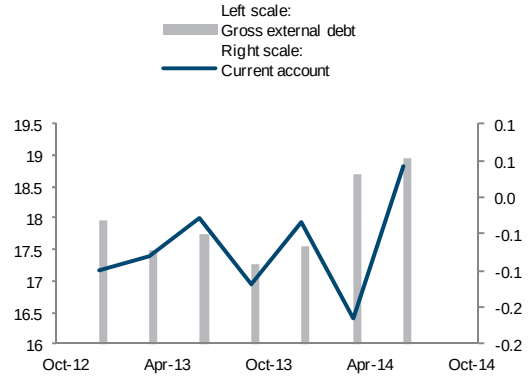
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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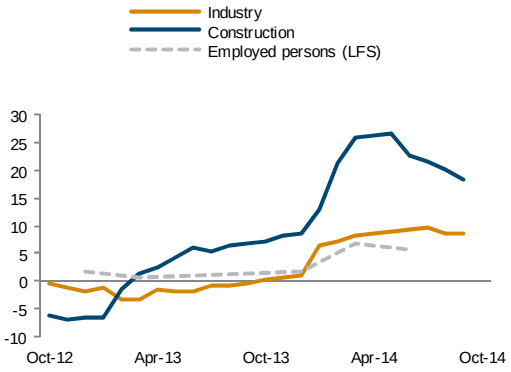
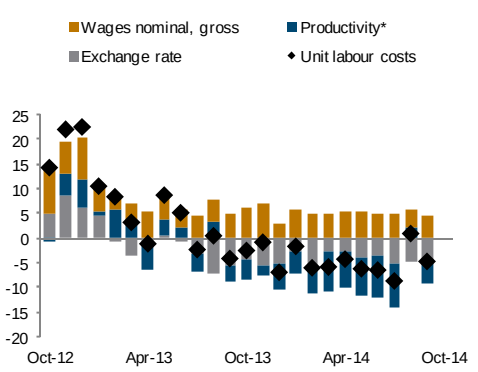
Hungary

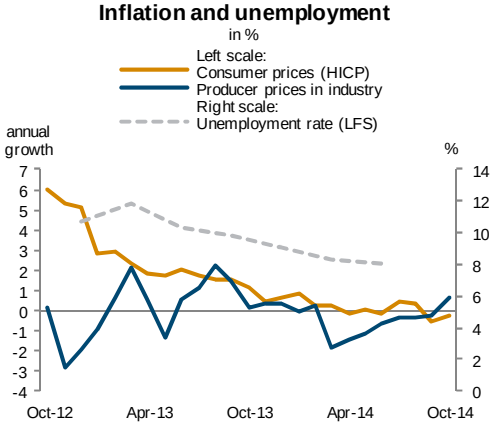
Real sector development
cumulated annual growth rate in %



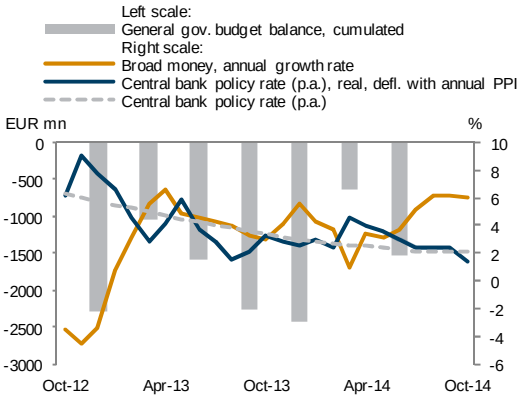
Unit labour costs in industry
annual growth rate in %



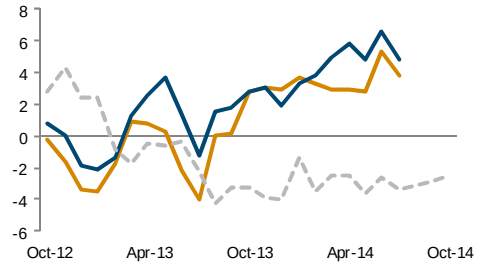
Inflation and unemployment
in %



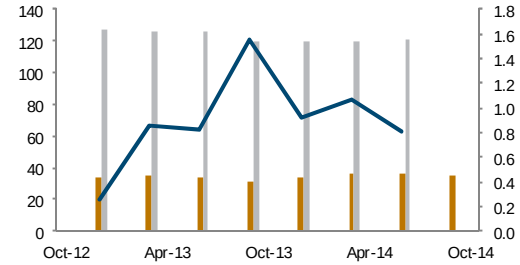
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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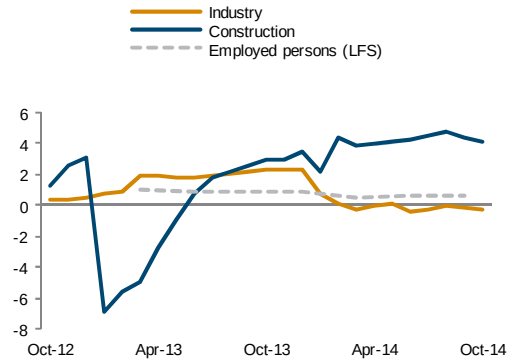
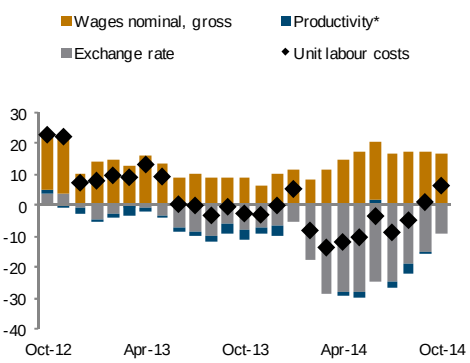
Kazakhstan

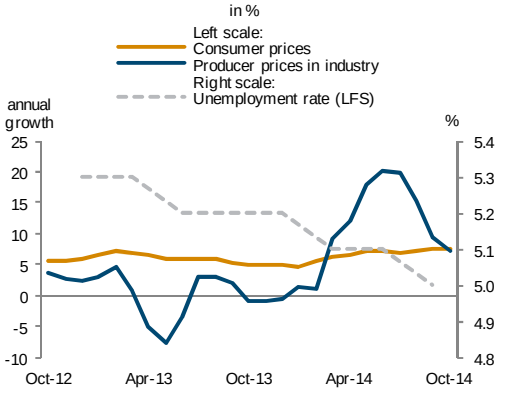
Real sector development
cumulated annual growth rate in %



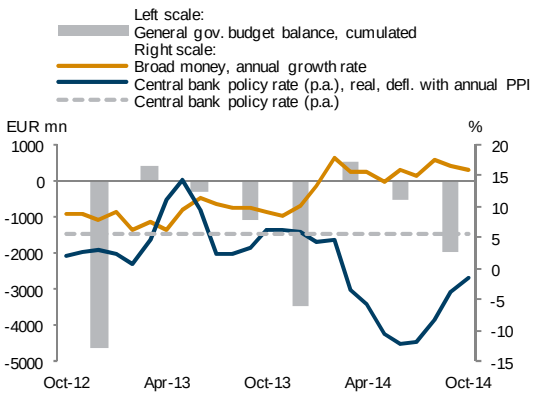
Unit labour costs in industry
annual growth rate in %



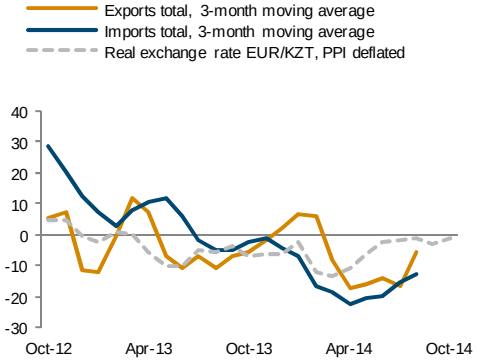
Inflation and unemployment
in %



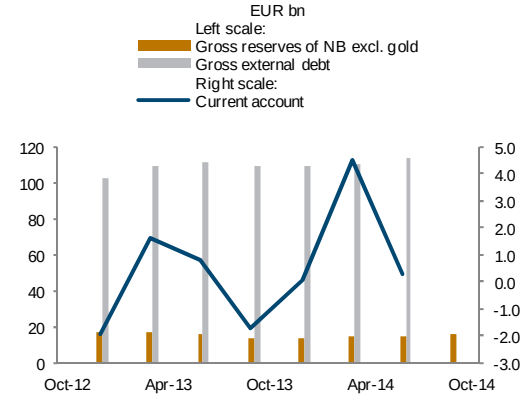
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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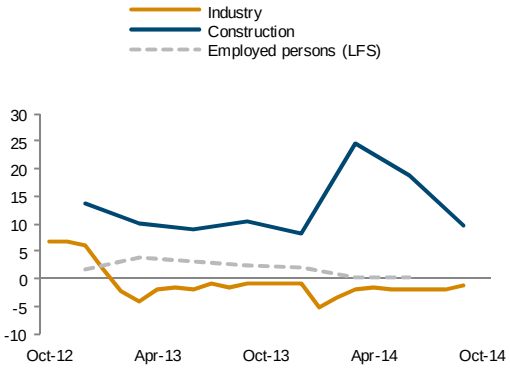
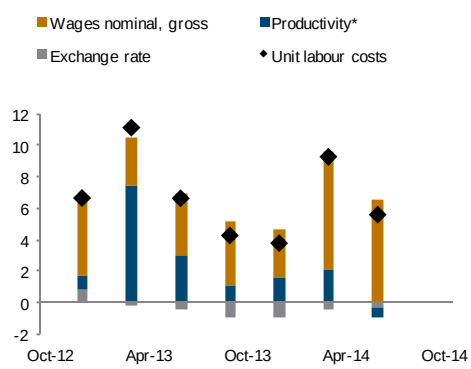
Latvia

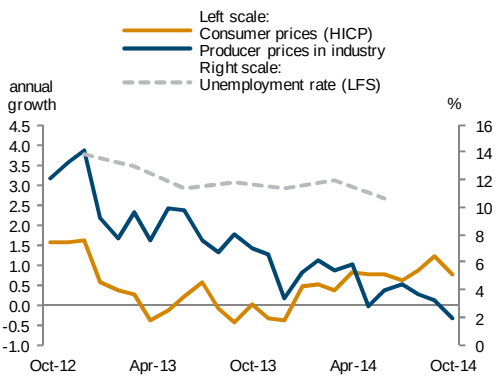
Real sector development
cumulated annual growth rate in %



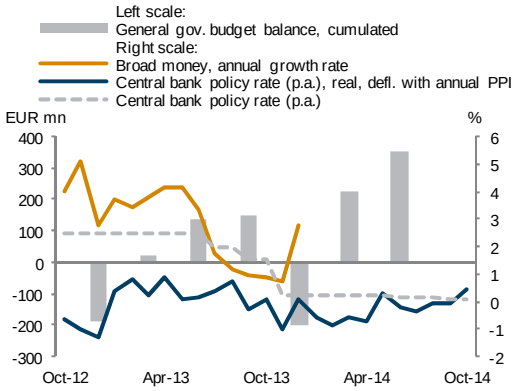
Unit labour costs in industry
annual growth rate in %



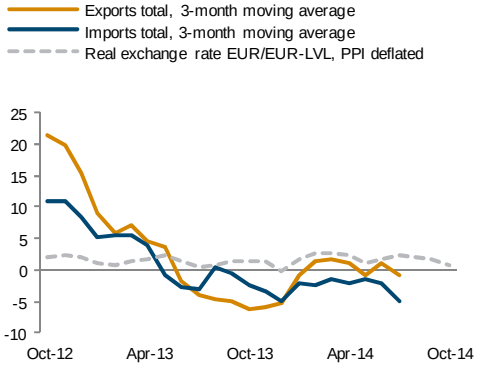
Inflation and unemployment
in %



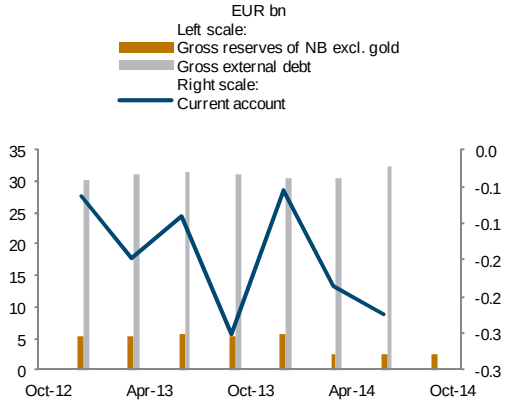
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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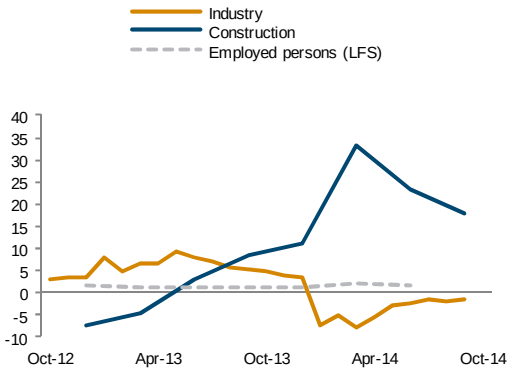
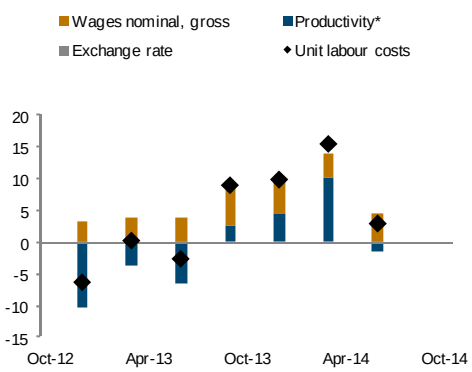
Lithuania

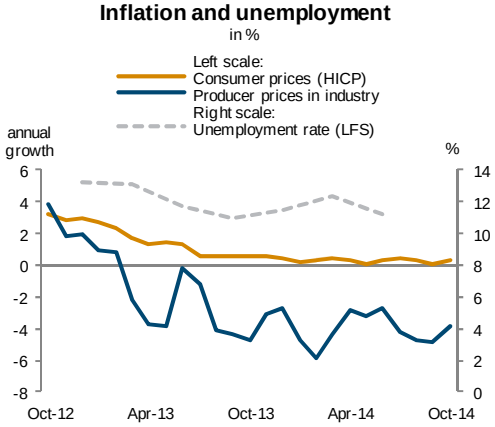
Real sector development
cumulated annual growth rate in %



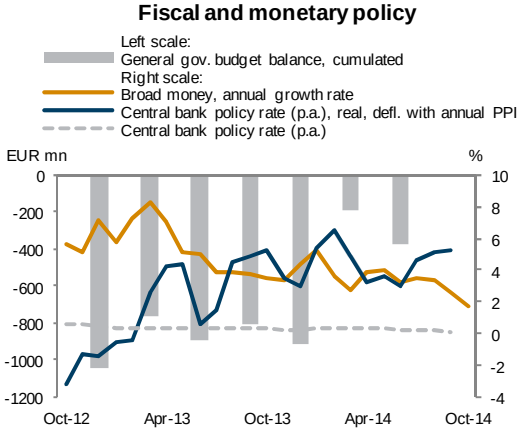
Unit labour costs in industry
annual growth rate in %



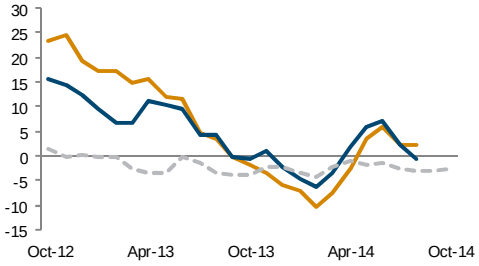
Inflation and unemployment
in %



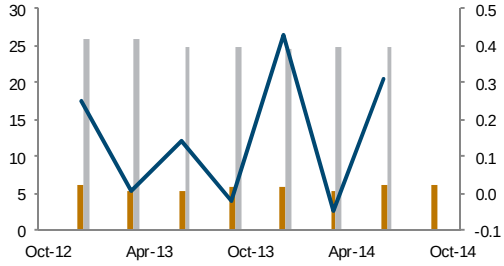
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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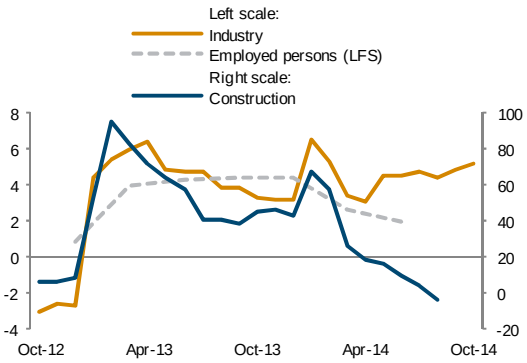
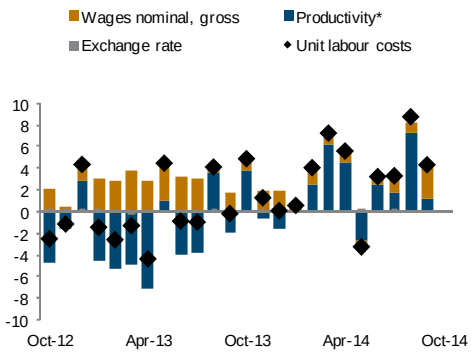
Macedonia

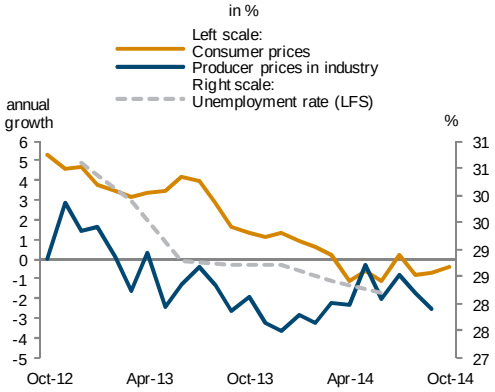
Real sector development
cumulated annual growth rate in %



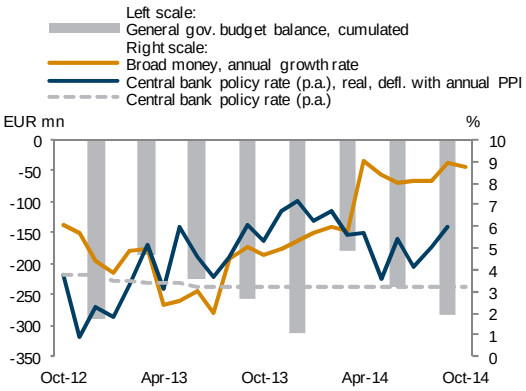
Unit labour costs in industry
annual growth rate in %



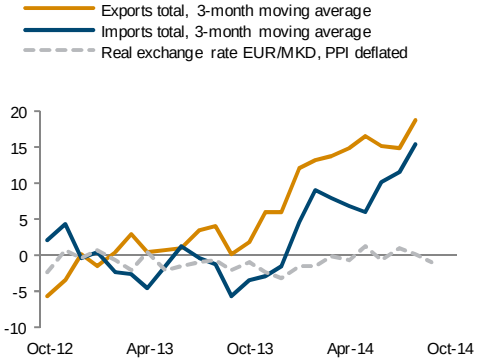
Inflation and unemployment
in %



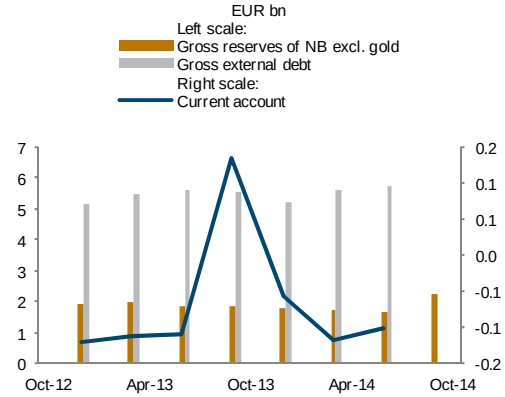
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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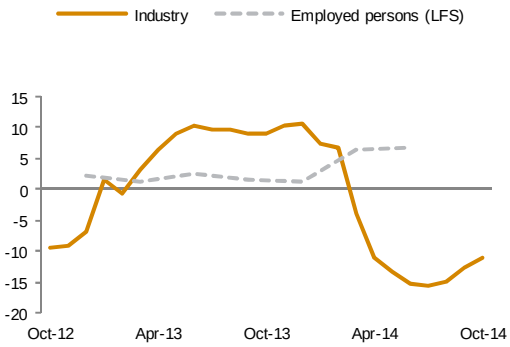
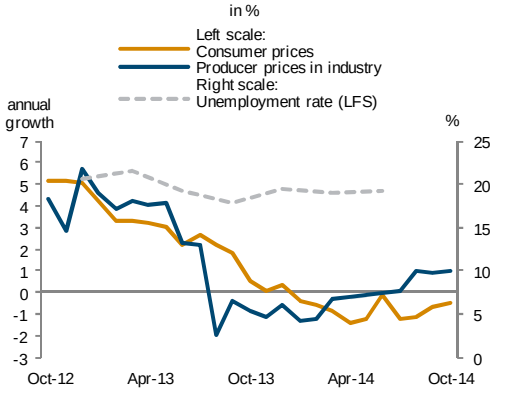
Montenegro

Real sector development
cumulated annual growth rate in %

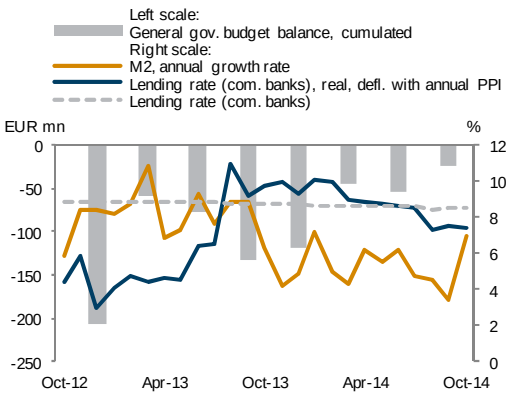


Unit labour costs in industry
annual growth rate in %

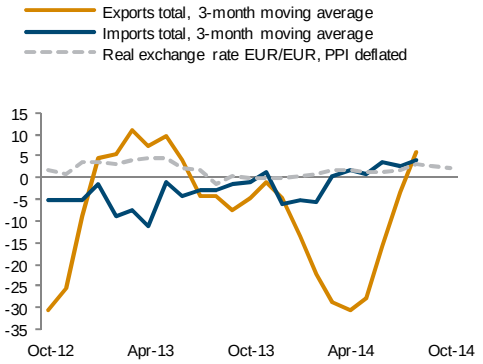
Inflation and unemployment
in %



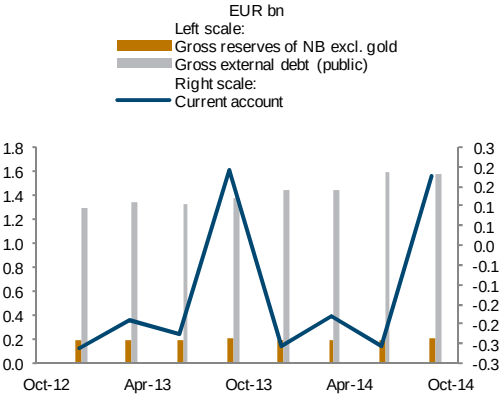
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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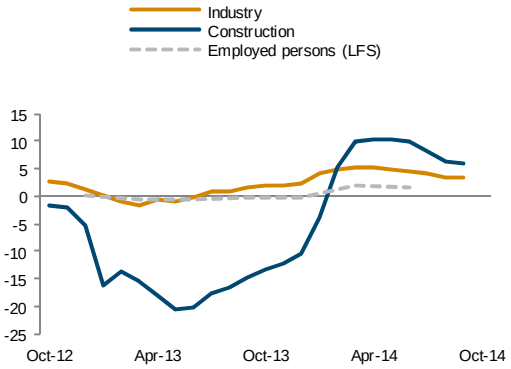
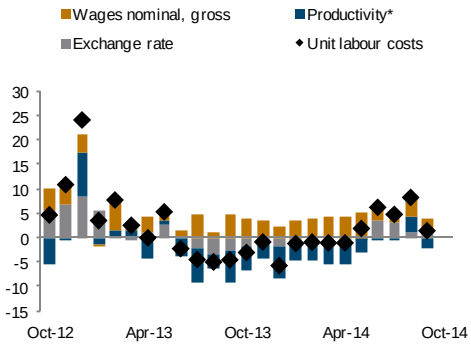
Poland

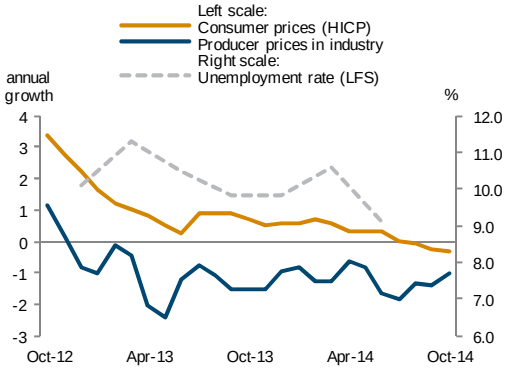
Real sector development
cumulated annual growth rate in %



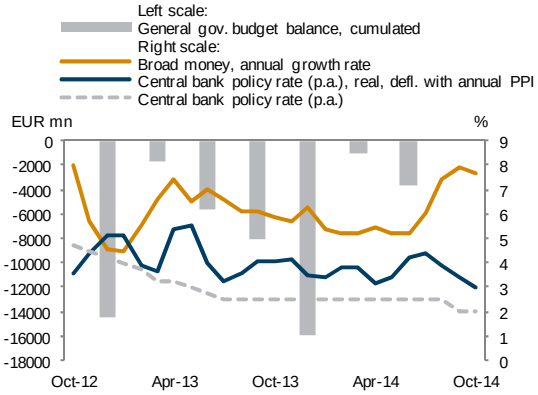
Unit labour costs in industry
annual growth rate in %



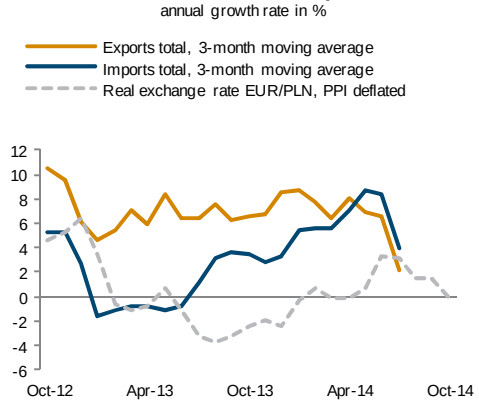
Inflation and unemployment
in %



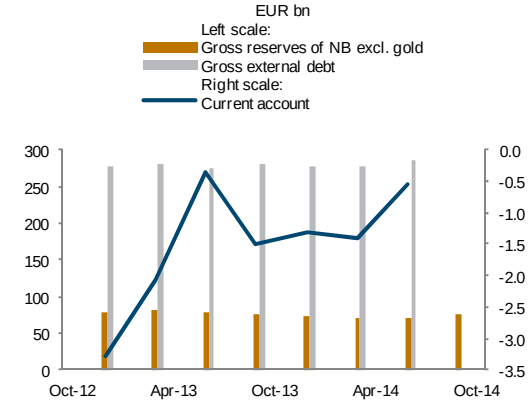
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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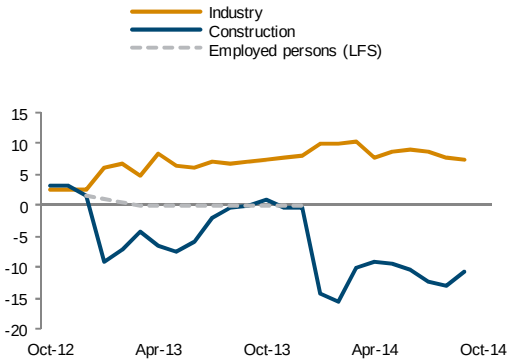
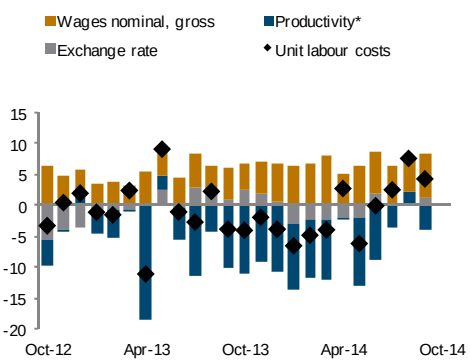
Romania

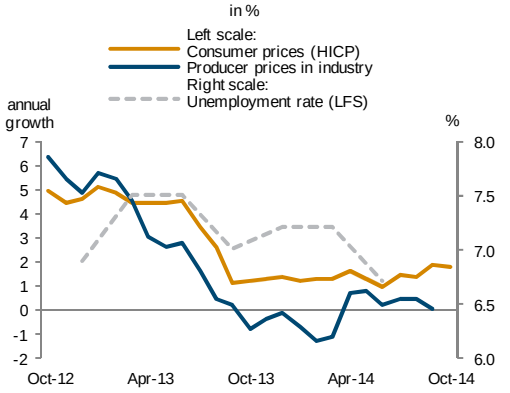
Real sector development
cumulated annual growth rate in %



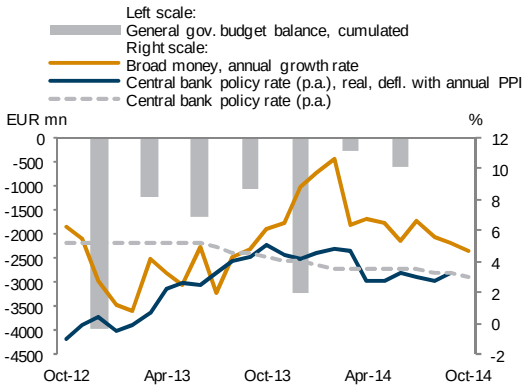
Unit labour costs in industry
annual growth rate in %



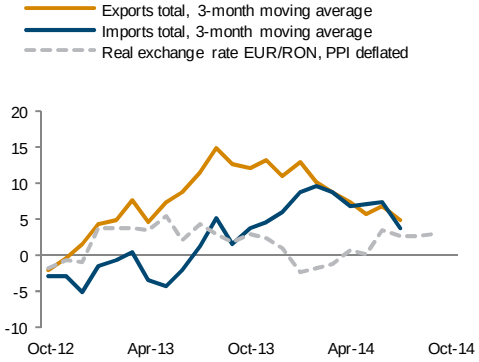
Inflation and unemployment
in %



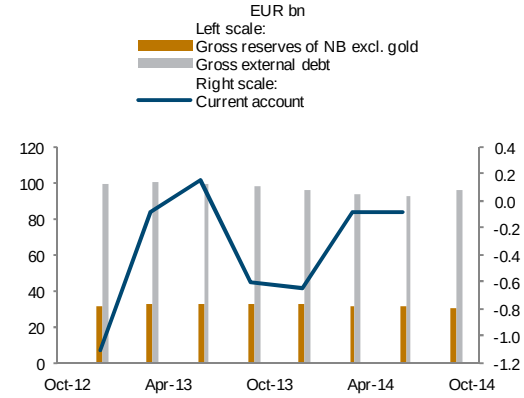
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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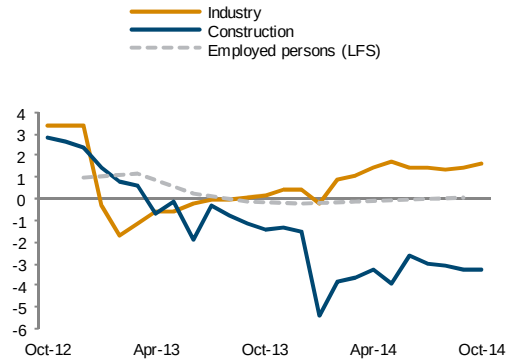
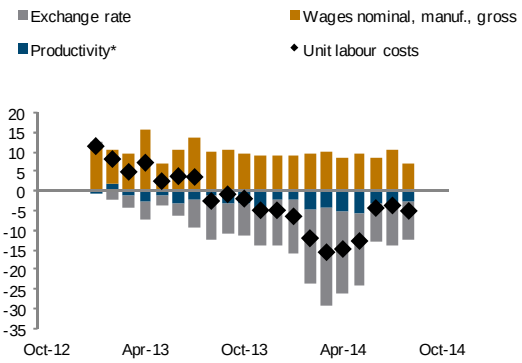
Russia

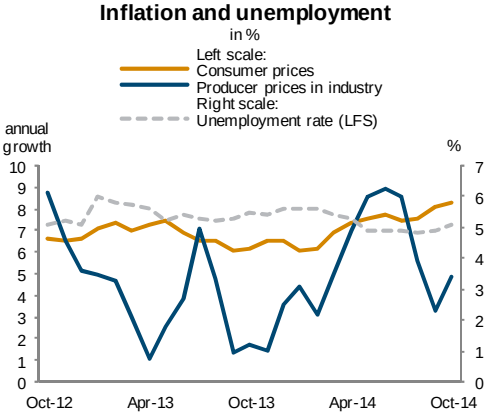
Real sector development
cumulated annual growth rate in %



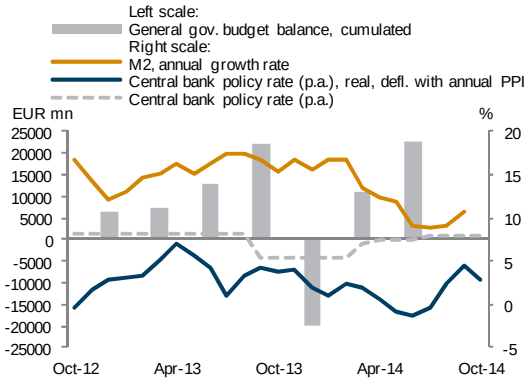
Unit labour costs in industry
annual growth rate in %



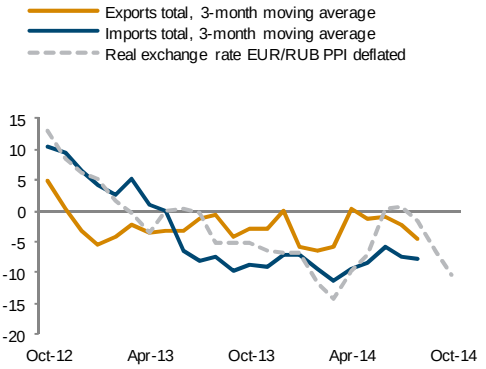
Inflation and unemployment
in %



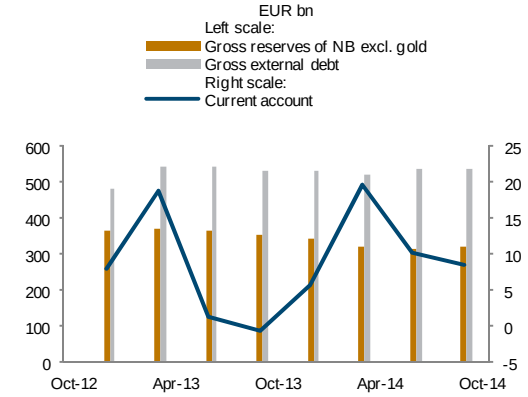
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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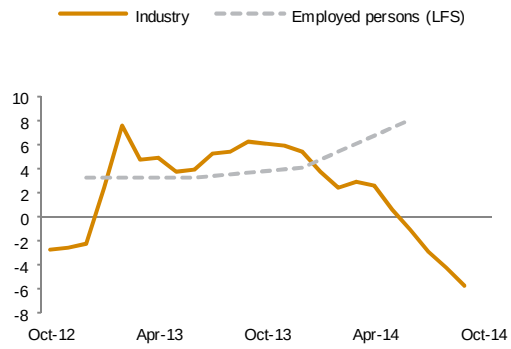
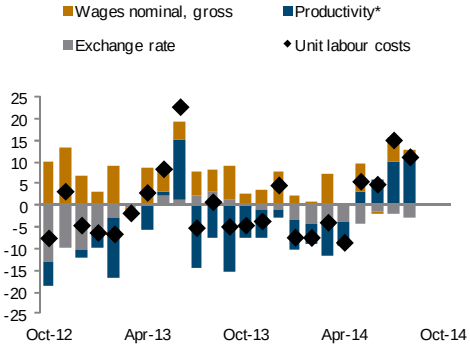
Serbia

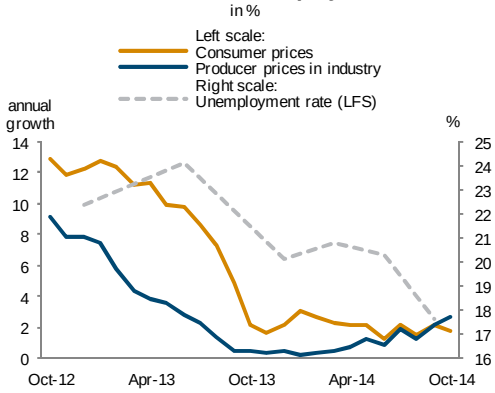
Real sector development
cumulated annual growth rate in %



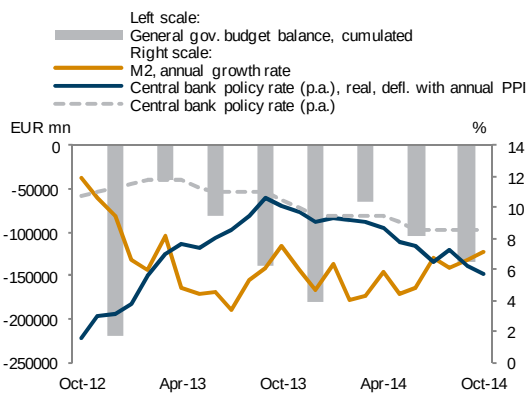
Unit labour costs in industry
annual growth rate in %



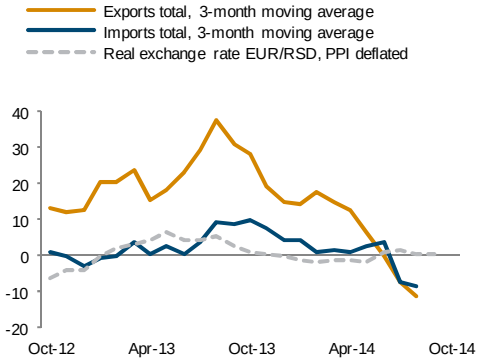
Inflation and unemployment
in %



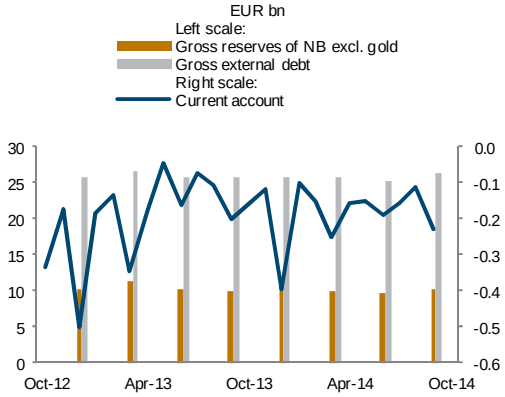
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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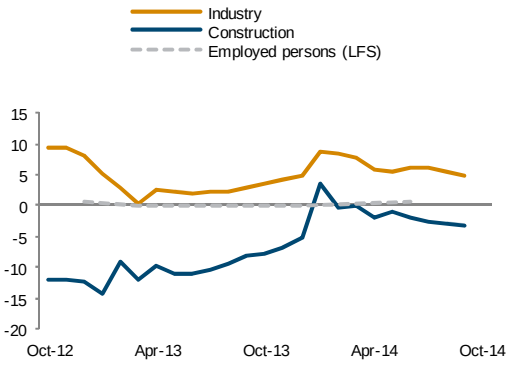
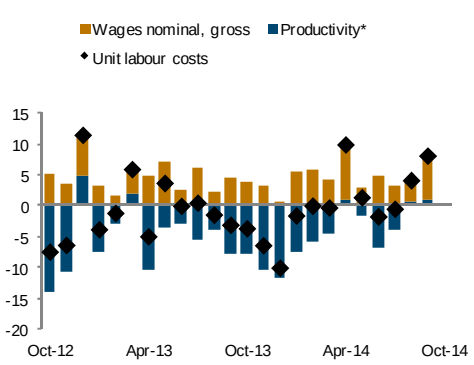
Slovakia

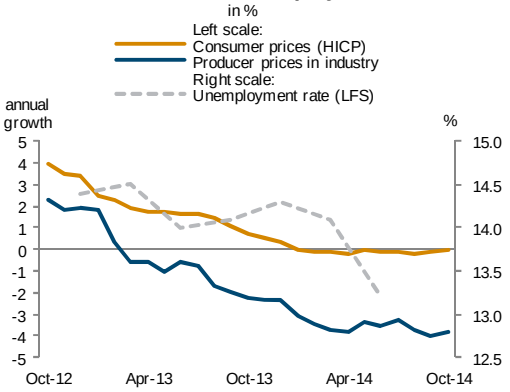
Real sector development
cumulated annual growth rate in %



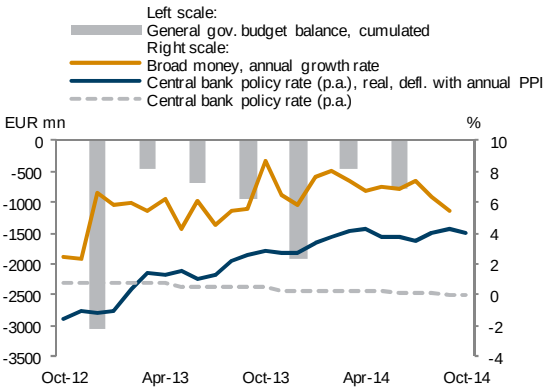
Unit labour costs in industry
annual growth rate in %



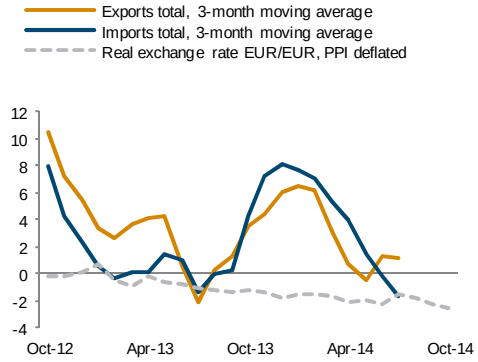
Inflation and unemployment
in %



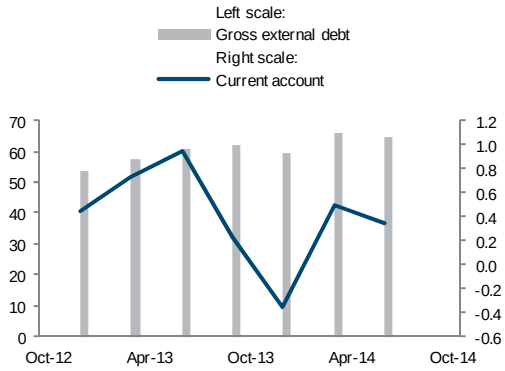
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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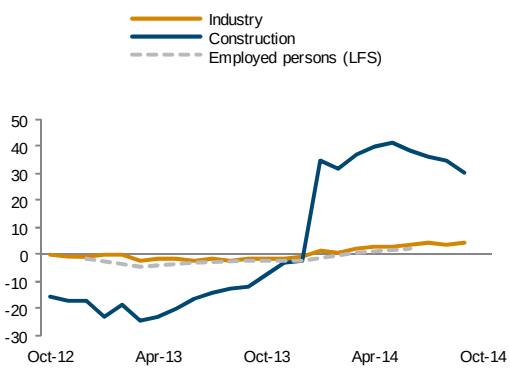
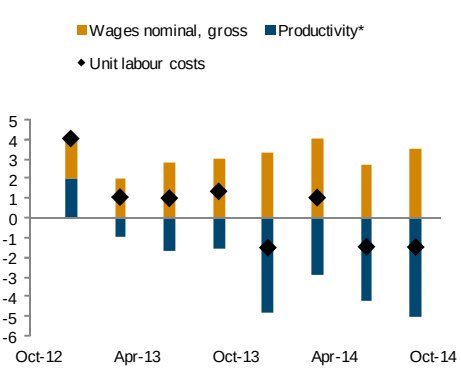
Slovenia

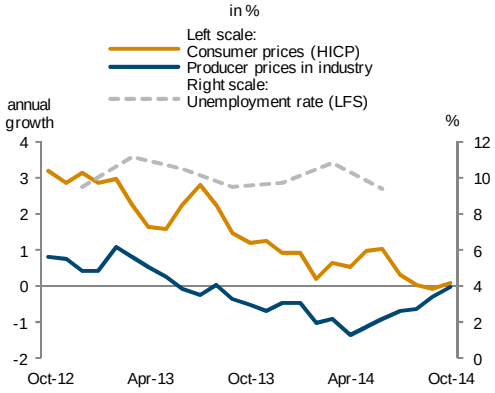
Real sector development
cumulated annual growth rate in %



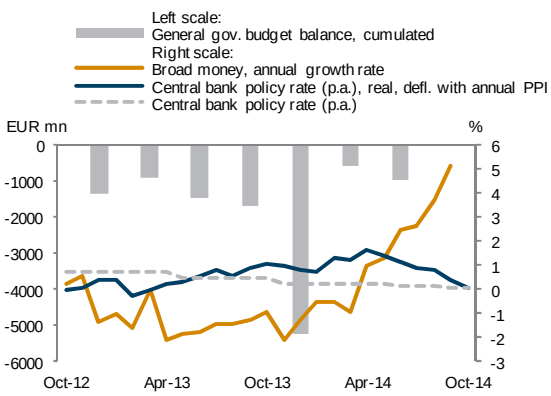
Unit labour costs in industry
annual growth rate in %



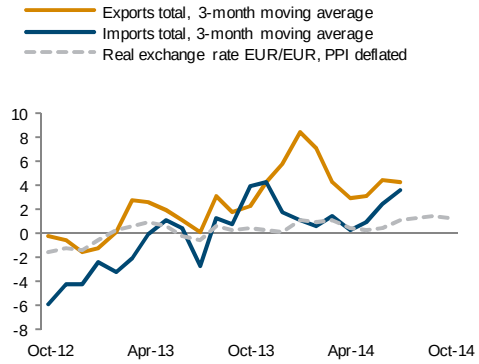
Inflation and unemployment
in %



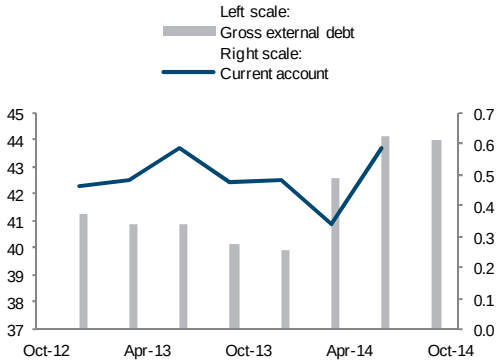
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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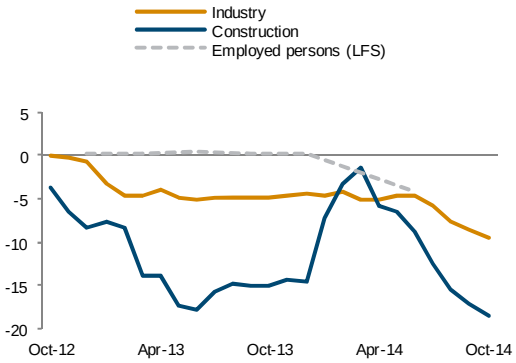
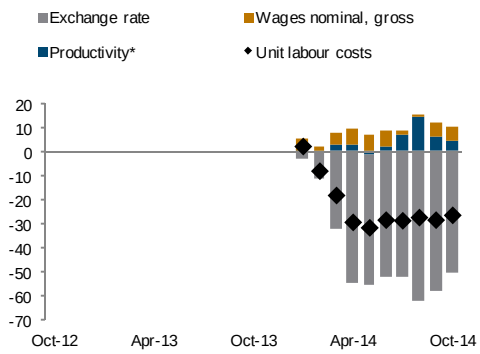
Ukraine

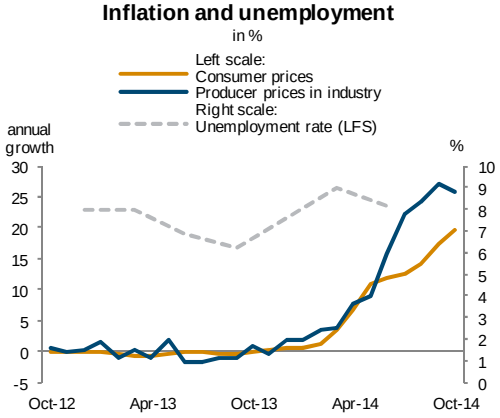
Real sector development
cumulated annual growth rate in %



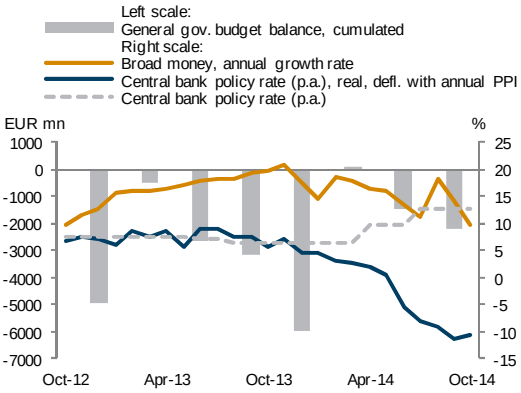
Unit labour costs in industry
annual growth rate in %



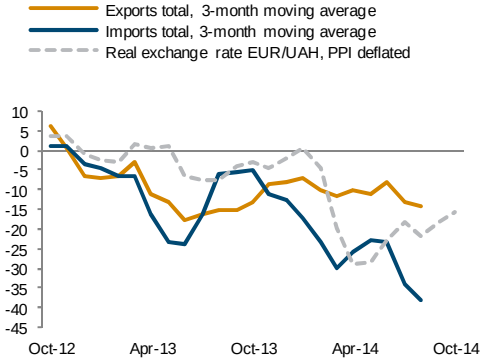
Inflation and unemployment
in %



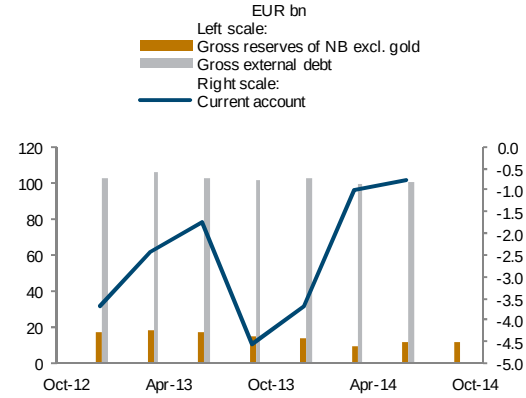
Fiscal and monetary policy



External sector development
annual growth rate in %



External finance
EUR bn



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Index of subjects – December 2013 to December 2014

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