Economy & Rates
Lessons of 2019

December 2019
(figures and charts updated on 13 December 2019)

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13/12/2019

ODDO BHF

Summary & Tables of forecasts

Summary
Lessons of 2019

- What were the highlights of 2019 and, most of all, what lessons can be drawn to shed light on the coming months? The slowdown in the global economy visible since its peak at the end of 2017 continued over the past year but did not intensify. Real world GDP grew at an average annual rate of around 4% over 2017 and 2018. It is only set to grow by 3.1% this year, a rate that has barely changed from one quarter to the next for about a year. Growth has weakened in all major countries – only marginally in the US (-0.1pts between 2017 and 2019) but to a greater extent elsewhere, including in the Eurozone (-1.3pts), and especially in Germany (-2pts).

- With economic growth dipping below its post-crisis trend, recessionary fears have dominated debates and assessments of economic policy. This is a healthy and logical reaction, since it is always preferable to adjust the policy mix as a preventative measure against risk factors than in reaction to them. At the end of the summer, the US president's tariff offensive caused these fears to take an exaggerated and almost phobic turn in the markets, completely disconnected with conditions in the real economy and the pragmatism of central banks. The general sentiment of markets, companies and households has become a little more encouraging in recent weeks as signs of a stabilisation of the industrial cycle (albeit at a low level) have emerged, the expansionary stance of monetary policies was confirmed and US-China trade talks resumed. In short, the world economy may be poised to exit the zone of turbulence it has weathered over the past two years. From this quick overview, we have identified the five major themes of 2019:

1. **The endless but intermittent trade war** – The trade/tariff war is a constant feature of the US President's words and actions – he even once called himself "Tariff Man". For Trump, everything is a pretext to raise tariffs or threaten to do so, to the point that the right reasons for using the tariff leverage (to enforce compliance with the principles of fair competition, including in China) are generally overshadowed by the wrong ones (from pure and simple blackmail to weakening America's competitors). Pressure from Donald Trump and his administration is intermittent, alternating between periods of rising and easing strains. One can never be sure if another about-turn is imminent. The result is that uncertainty related to international trade has increased structurally. A return to a normal (pre-Trump) situation is not foreseeable in a visible time horizon. The economic outlook is necessarily affected by this structural shift, since a higher degree of uncertainty tends to depress business confidence and capital expenditure.

2. **The abrupt U-turn by central banks, led by the Fed** – When the Fed raised interest rates for the 9th time in December 2018, its plan was to continue down this path throughout 2019 with three additional hikes, while continuing to shrink its balance sheet. A year later, the Fed has cut rates three times and resumed asset purchases in a bid to raise the amount of liquidity available for banks. It is rare, and perhaps unprecedented, for the Fed to make such a U-turn without a radical change in the economic outlook. This reveals huge aversion to the risk of a recession, born perhaps from fears about not having the usual firepower to tackle one, but it is also a reflection of receding inflationary risk. The Fed considers that unemployment can stay very low without putting strains on wages and prices. All other central banks have adjusted their monetary policy accordingly.

3. **The decoupling between industrial and non-industrial sectors** – Manufacturing activity is contracting moderately at the global scale (by approximately -1%) and severely in some places (-5% in Germany). Manufacturing has been weakening since the start of 2018, and many predicted the same fate for the rest of the economy. In practice, contagion has been weak or limited. The services, trade and construction sectors – less exposed than industry to external risks – have not weakened, reflecting the strength of domestic demand, including in Europe. It is the health of employment and credit markets, far more than global trade developments, that determines the lion's share of growth. From this standpoint, the outlook remains encouraging.

4. **The limits of the current German economic "model"** – broadly speaking, it is tempting to say that in two years the German economy has gone from being a "superstar" (at least in the European league) to the "sick man of Europe" – the label attached to it in the 1990s. A powerful export capacity, with an oversized automotive sector, is not what is needed in today's world. What's more, economic policy makers are hostile to any deviation from orthodoxy, whether monetary (although the Bundesbank has lost control here to the ECB) or fiscal, and look on any European integration plans with the greatest scepticism.

5. **Political fragmentation in Europe** – All recent political events (elections to the European Parliament, regional elections in Germany, legislative elections in Spain, changes of government in Italy and the UK) have demonstrated that the old bipartisan divide has ended. Fragmentation is here to stay, but contrary to what has sometimes been feared, this has not been to the benefit of so-called populist parties. The example of Brexit in 2019, after that of Greece in 2015, demonstrates that it is easy to promise the earth by exiting the EU (or the Eurozone) but impossible to keep this promise. Reality takes its revenge, as Johnson and Tsipras finally understood. This is strong incentive to reform the EU from the inside.

Table of forecasts (1)

FORECASTS - REAL GDP GROWTH*

	Average			2019				2020				Consensus**	
	2018	2019	2020	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020
World	3.7	*3.1*	*2.9*										
US	2.9	*2.3*	*1.7*	3.1	2.0	1.9	*1.5*	*1.6*	*1.7*	*1.8*	*1.8*	2.3	1.8
EMU	1.9	*1.2*	*1.3*	1.7	0.8	0.9	*1.2*	*1.4*	*1.5*	*1.6*	*1.6*	1.1	0.9
- Germany	1.5	*0.6*	*0.9*	1.9	-1.0	0.3	*0.5*	*1.1*	*1.3*	*1.5*	*1.5*	0.5	0.8
- France	1.7	*1.3*	*1.7*	1.1	1.4	1.0	*1.7*	*1.8*	*1.8*	*1.8*	*1.8*	1.3	1.2
- Italy	0.7	*0.2*	*0.7*	0.5	0.3	0.3	*0.5*	*0.6*	*0.9*	*1.0*	*1.0*	0.1	0.4
- Spain	2.4	*2.0*	*1.8*	2.2	1.6	1.7	*1.6*	*1.9*	*1.9*	*1.9*	*1.9*	2.1	1.7
UK	1.4	*1.3*	*1.0*	2.3	-0.9	1.2	*0.8*	*0.8*	*1.2*	*1.6*	*1.6*	1.2	1.0
Japan	0.8	*0.9*	*0.4*	2.0	1.8	0.2	*-2.0*	*1.0*	*1.0*	*1.0*	*1.0*	1.0	0.2
China (y/y%)	6.6	*6.1*	*5.8*	6.4	6.2	6.0	*5.8*	*5.8*	*5.8*	*5.8*	*5.8*	6.2	5.9

* y/y or q/q annualised rate

**14 October 2019

FORECASTS - RATES & FX

	Actual	Target		Last 5 years*		Average					
	13/11/2019	3M	12M	High	Low	2015	2016	2017	2018	*2019*	2020
Policy rate											
Fed funds (upper)	1.75	1.75	1.75	2.50	0.25	0.27	0.52	1.13	1.96	*2.31*	*1.75*
ECB deposit rate	-0.50	-0.50	-0.50	-0.20	-0.50	-0.20	-0.38	-0.40	-0.40	*-0.43*	*-0.50*
10Y rate											
US T-note	1.9	1.8	2.0	3.2	1.5	2.1	1.8	2.3	2.9	*2.1*	*1.9*
German Bund	-0.3	-0.3	-0.3	0.8	-0.6	0.5	0.1	0.4	0.5	*-0.2*	*-0.3*
French OAT	0.0	0.0	0.0	1.2	-0.3	0.8	0.5	0.8	0.7	*0.1*	*0.0*
Forex											
EUR/USD	1.10	-	1.15	1.23	1.05	1.11	1.11	1.13	1.18	*1.12*	*1.13*
USD/JPY	109	-	105	124	101	121	109	112	110	*109*	*107*
USD/RMB	7.02	-	7.10	7.12	6.19	6.28	6.64	6.76	6.61	*6.91*	*7.06*

*monthly average

13/12/2019

Source: consensus forecasts, IMF, ODDO BHF

Table of forecasts (2)

FORECASTS - KEY MACRO DATA for US, EMU, & France *

	Average			2019				2020			
	2018	2019	2020	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
United States											
Real GDP	2.9	2.3	1.7	3.1	2.0	1.9	1.5	1.6	1.7	1.8	1.8
Private Consumption	3.0	2.6	2.4	1.1	4.6	2.9	2.2	2.1	2.1	2.1	2.1
Nonresidential Investment	6.4	2.1	0.6	4.4	-1.0	-3.0	0.0	1.0	2.0	2.0	2.0
Residential Investment	-1.5	-1.7	2.4	-1.0	-3.0	5.1	2.0	2.5	2.5	2.5	2.5
Domestic Demand (contribution, %pt)	3.2	2.4	2.1	1.9	3.7	2.0	1.9	1.9	2.1	2.2	2.2
Inventories (contribution, %pt)	0.1	0.2	-0.1	0.5	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Exports (contribution, %pt)	-0.4	-0.3	-0.4	0.8	-0.8	-0.1	-0.4	-0.4	-0.4	-0.4	-0.4
Inflation (CPI, % yoy)	2.4	1.8	2.3	1.6	1.8	1.8	2.0	2.3	2.3	2.3	2.4
Unemployment rate (%)	3.9	3.7	3.6	3.9	3.6	3.6	3.6	3.6	3.6	3.6	3.5
Euro area											
Real GDP	1.9	1.2	1.3	1.7	0.8	0.9	1.2	1.4	1.5	1.6	1.6
Private Consumption	1.4	1.2	1.5	1.4	0.8	1.4	1.5	1.6	1.7	1.7	1.7
Investment	2.4	7.2	3.5	1.9	24.6	2.5	1.9	2.2	2.2	2.6	2.6
Domestic Demand (contribution, %pt)	1.4	2.3	1.8	1.4	5.3	1.6	1.4	1.5	1.6	1.7	1.7
Inventories (contribution, %pt)	0.0	-0.3	0.0	-0.8	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0
Net Exports (contribution, %pt)	0.4	-0.8	-0.4	1.3	-4.3	-0.6	-0.2	-0.1	-0.1	-0.1	-0.1
Inflation (HICP, % yoy)	1.8	1.2	1.3	1.4	1.4	1.0	0.9	1.1	1.2	1.3	1.4
Unemployment rate (%)	8.2	7.5	7.1	7.8	7.6	7.4	7.3	7.2	7.1	7.0	6.9
France											
Real GDP	1.7	1.3	1.7	1.1	1.4	1.0	1.7	1.8	1.8	1.8	1.8
Private Consumption	0.9	1.2	1.7	1.5	0.9	1.3	1.8	1.8	1.8	1.8	1.8
Investment	2.8	3.4	2.4	2.1	5.1	3.8	2.0	2.1	2.0	2.0	2.0
Domestic Demand (contribution, %pt)	1.3	1.7	1.8	1.3	2.1	2.0	1.7	1.8	1.7	1.7	1.7
Inventories (contribution, %pt)	-0.3	-0.2	0.1	1.1	-0.8	0.6	0.1	0.1	0.1	0.1	0.1
Net Exports (contribution, %pt)	0.7	-0.2	-0.2	-1.3	0.2	-1.6	-0.1	0.0	0.0	0.0	0.0
Inflation (HICP, % yoy)	2.1	1.3	1.4	1.4	1.3	1.2	1.1	1.3	1.3	1.4	1.5
Unemployment rate (%)	8.7	8.3	7.8	8.4	8.2	8.3	8.2	8.0	7.8	7.7	7.6

* y/y or q/q annualised rate

Source: Thomson Reuters, ODDO BHF

Lessons of 2019

World growth has stabilised at around 3% annually

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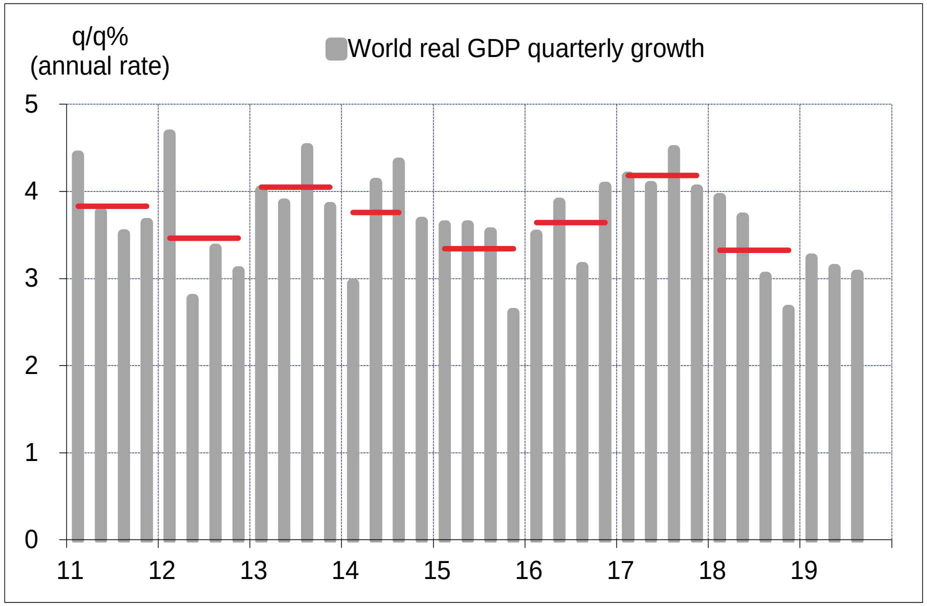

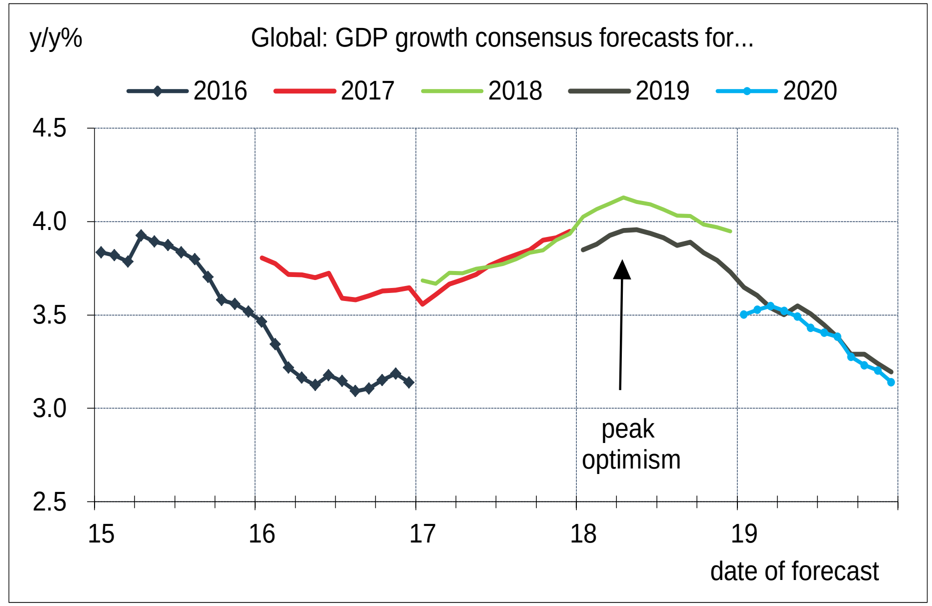

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Based on final Q3 data, world real GDP growth stood at 3.1% q/q annualised (vs 3% on average over the four preceding quarters) ①. In short, the trend has stabilised but is below its post-crisis average.

The consensus outlook does not point to any notable improvement in 2020 relative to 2019 ②. The downward revisions process seen over the past two years is not gathering pace and appears instead to be stabilising.

- It is common practice to compare average annual growth, but this can mask short-term momentum. The Eurozone will end 2019 with a weak "carry-over", but the average growth forecast implies a small year-on-year acceleration in 2020.

13/12/2019

Source: Thomson Reuters, consensus Inc. ODDO BHF

Lessons of 2019 (1)
Intermittent tariff war = Permanent trade uncertainty

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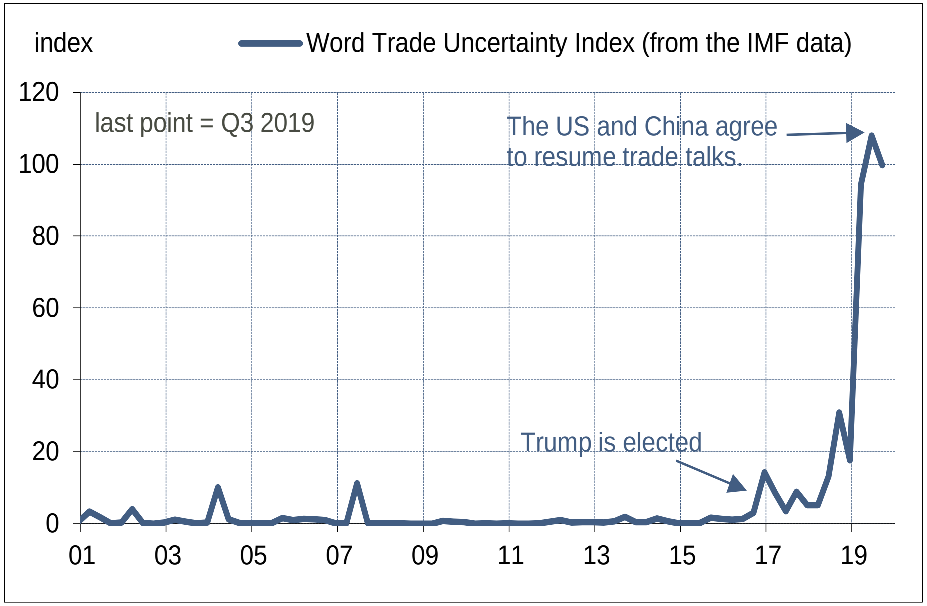

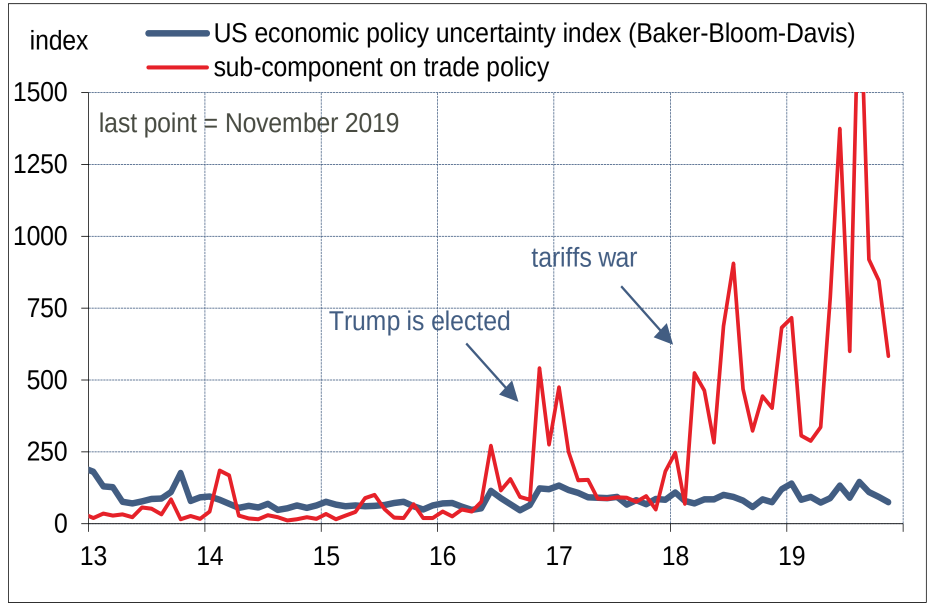

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The White House has been blowing hot and cold on questions relating to international trade. Recently, hot air (discussions of a mini-deal with China, ratification of the USMCA) has predominated, but this cannot reverse the damage inflicted on free trade rules over the past two years.

- The IMF has calculated a trade uncertainty index based on economic reports from 143 countries. Despite some moderation in Q3 (resumption of negotiations with China), it is far higher than in recent decades ①. This is also true of indicators focusing on the US ②.
- The US administration's recent decision to shut down the WTO's appellate body illustrates a structural shift in its trade policy as it abandons multilateralism in favour of bilateral relationships.

13/12/2019

Source: IMF, Thomson Reuters, ODDO BHF

Two years of tariff war = a negative-sum game

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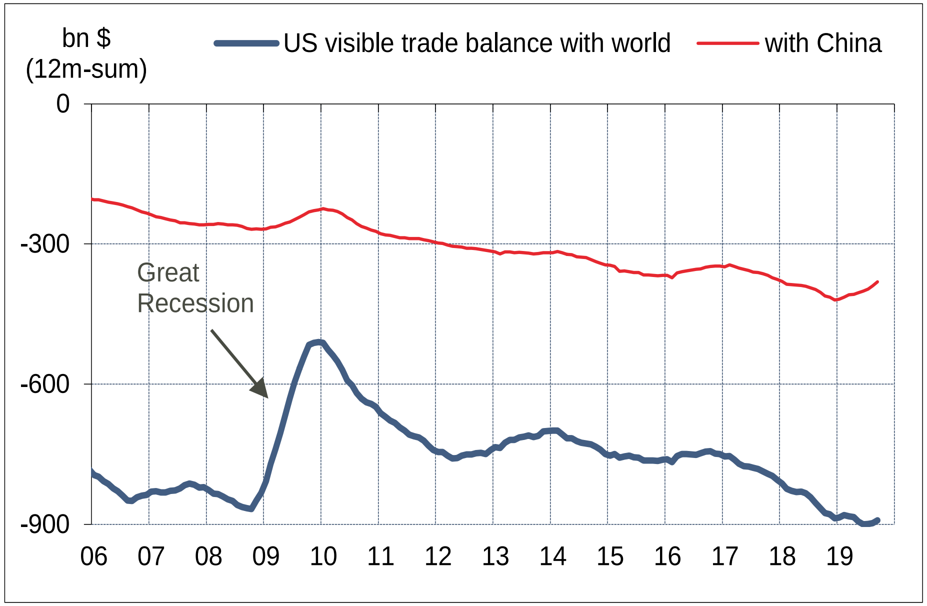

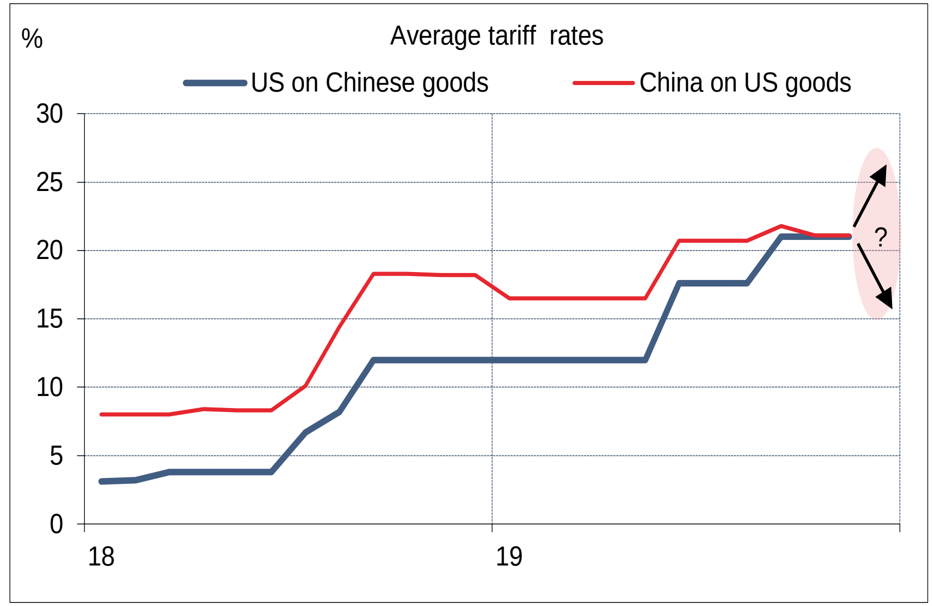

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If the objective of the tariff war was to reduce the US trade deficit with China or, more broadly, the rest of the world, it has been a complete failure. This is perfectly logical ①.

- The trade balance is determined by macroeconomic factors (investment, savings and economic growth), not by the level of tariffs. Added to this, any protective measures taken by the US have been followed by retaliatory measures by China ②. By reducing the fluidity of trade, everyone loses from it.
- Leaving political considerations to one side (a battle of egos), the only decision that would be durably positive for both economic activity and business confidence would be for the two countries to lower their tariffs, not simply to freeze them. However, because of technological competition, non-tariff barriers (access to markets) are likely to remain high.

13/12/2019

Source: IMF, Thomson Reuters, ODDO BHF

Lesson of 2019 (2)
180-degree U-turn of monetary policies

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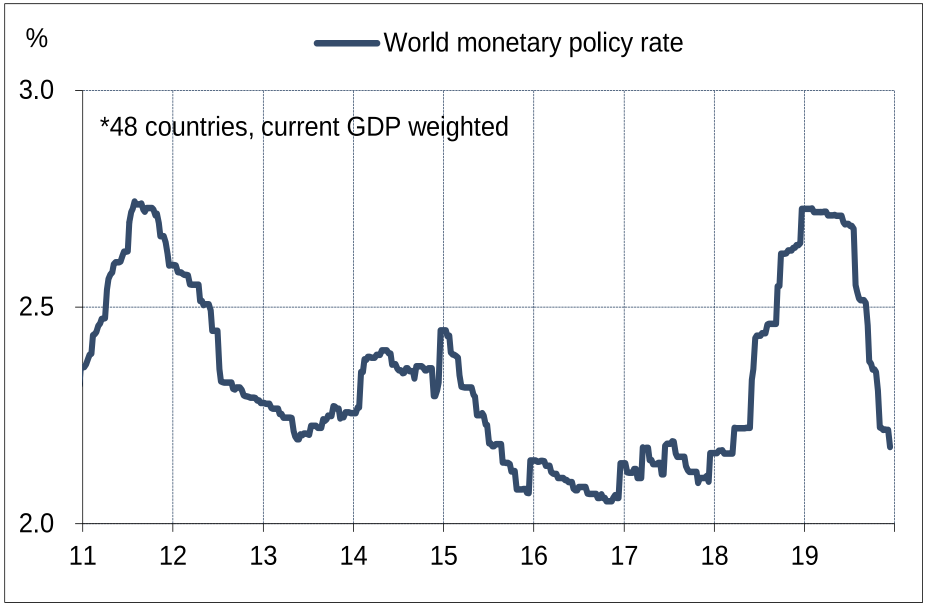

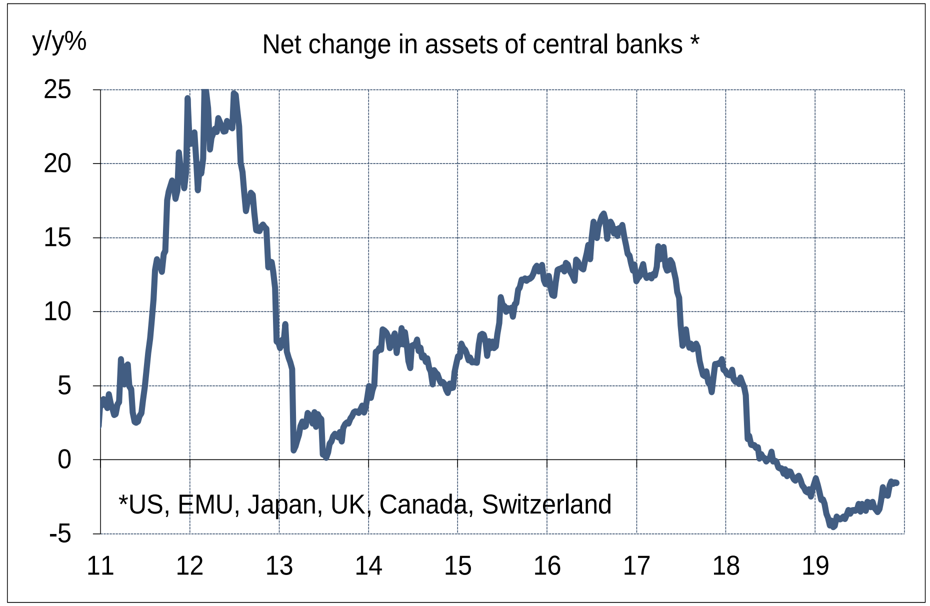

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The general orientation of monetary policies changed direction over the course of the year, even though economic conditions did not materially change. Recessionary risk easily predominates over inflationary risk in central banks' reaction functions.

- Monetary loosening applies to the level of policy rates ① but also to the asset purchase policy ②.
- The Fed has abandoned its normalisation programme due to run until 2021 (three cuts vs three hikes forecast in 2019). It has swollen its balance sheet by around $250bn in response to the liquidity crisis in the repo market last September.
- The ECB has abandoned its (vague) intentions to exit the NIRP in 2020 and intensified/prolonged this policy. It has also revived its asset purchase programme to the tune of €20bn per month (the share of public securities is 54% vs 84% in the previous QE).

13/12/2019

Source: Thomson Reuters, ODDO BHF

Fed: unanimous agreement to make no more changes until 2021

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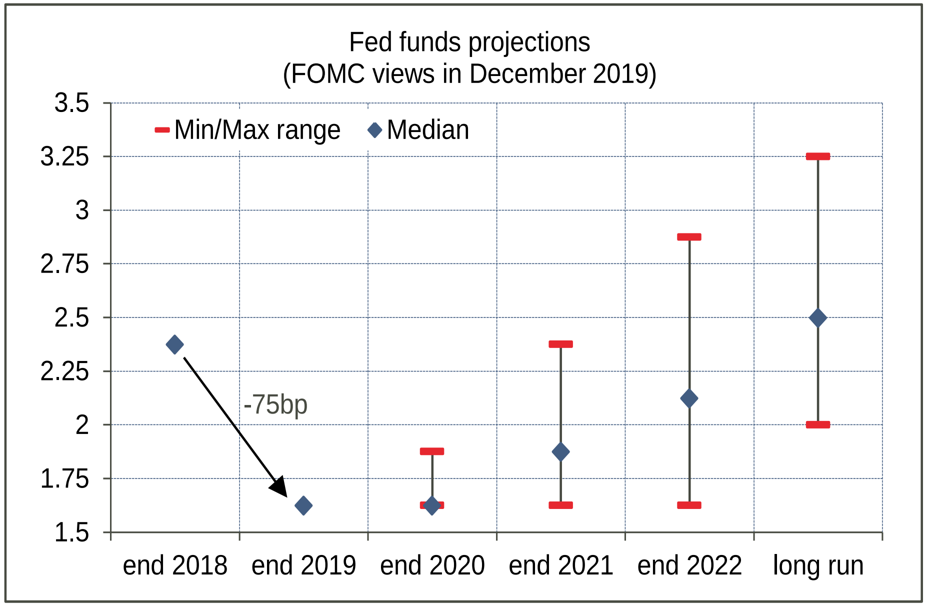

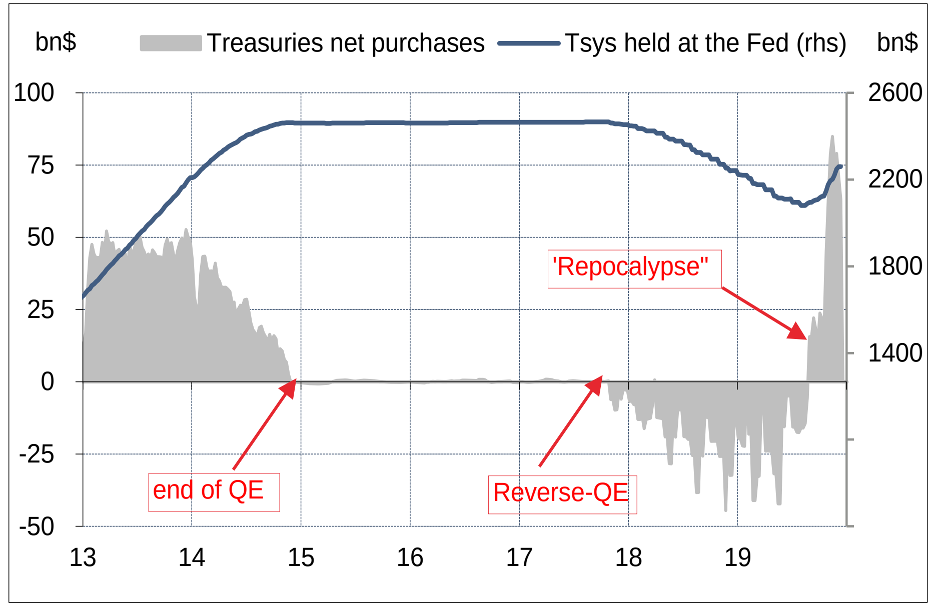

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After a radical change of direction this year (three rate cuts and purchases of short-term securities), the Fed is now positioned to keep its monetary policy on hold during the 2020 electoral year, or even beyond then ①.

- There are downside risks to activity, but to a lesser degree than a few months ago (stabilisation of the industrial cycle, renewal of US-China discussions, Brexit), and hence insufficient to prolong the loosening cycle. The Fed also sees no inflation risks through its forecast horizon. The Fed considers that unemployment can stay very low (well below the NAIRU) without generating material wage strains. If these were to emerge, there would still be time to tighten its policy again. The Fed is prepared to tolerate an overshooting of its inflation target after years of undershooting.
- Following turbulence in the repo market last September, the Fed is handling the problem very pragmatically by offering more liquidity at longer maturities. In recent weeks, the expansion of its balance sheet was significant ②, but this is a temporary adjustment, not a lasting revival of its asset purchase policy.

13/12/2019

Source: Fed, ODDO BHF

ECB: continuity on monetary policy + strategic review

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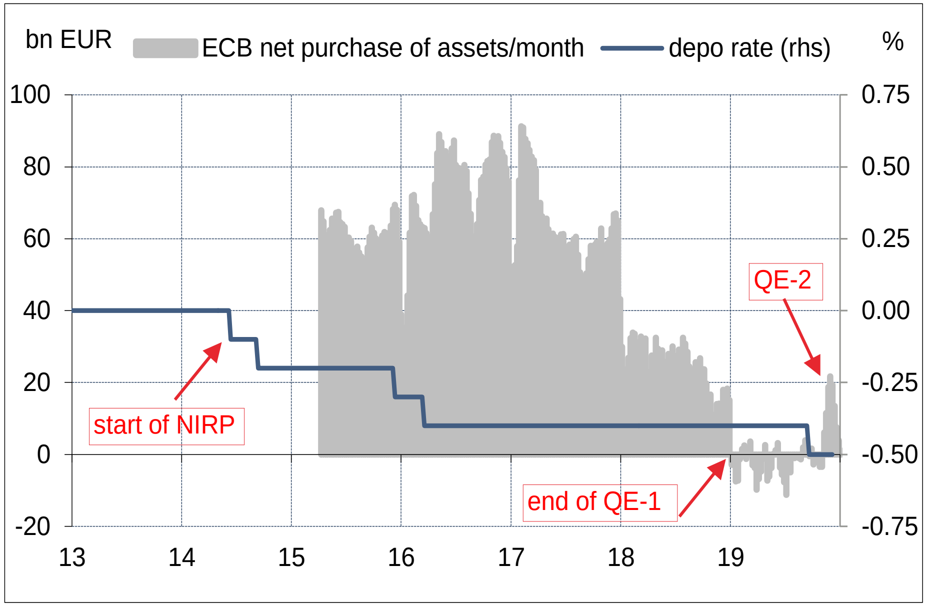

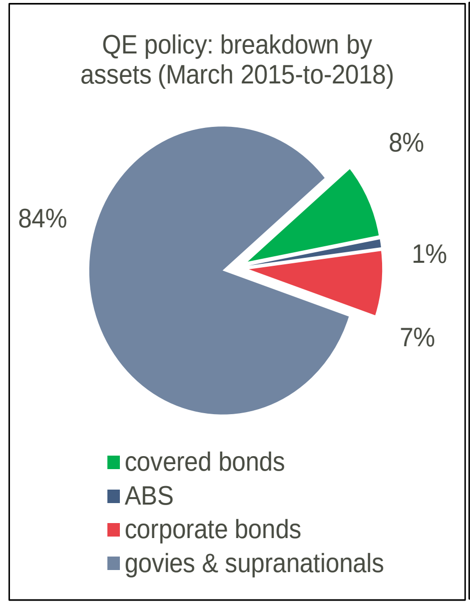

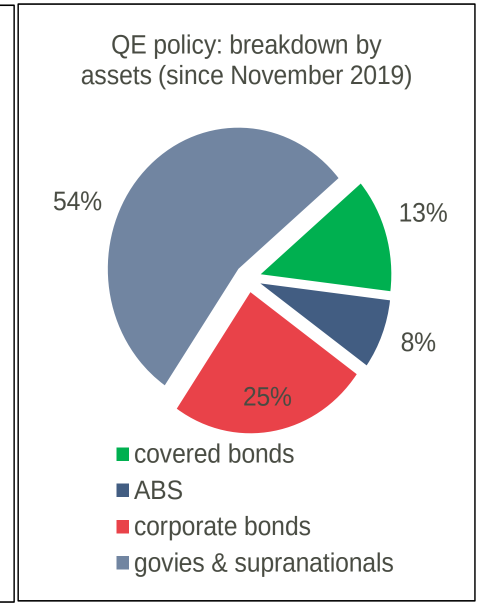

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Through her apparently more consensual style than Mario Draghi and by the announcement of a strategic review in 2020, new president Christine Lagarde has reduced the visible degree of dissent within the Council. The "package" of measures unveiled in September is being implemented in accordance with announcements.

- Since early November, the ECB has revived an asset purchase programme at a rate of €20bn per month, with no pre-set end date ①. At this stage, the breakdown of securities purchases differs from the previous programme (reduction in share of sovereign bonds ②).
- The strategic review will assess arguments for and against past policies (QE, NIRP, TLTRO), with no pointless controversies. Most existing assessments have concluded that these policies stimulated economic growth, stemmed deflation risk (but did not revive inflation) and encouraged bank lending and that they are not the principal cause of banks' weak profitability. This strategic review is also likely to be the foundation for closer cooperation with policies decided on by the EU, in particular on today's hot topic: the objective to decarbonise the economy over the long term.

13/12/2019

Source: BCE, ODDO BHF

Lesson of 2019 (3)
Decoupling of industrial and non-industrial sectors

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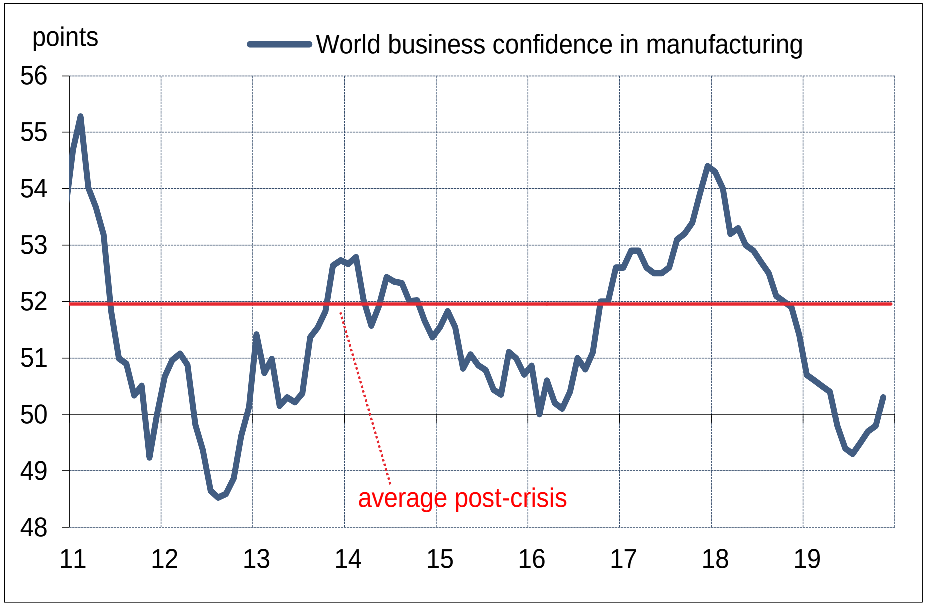

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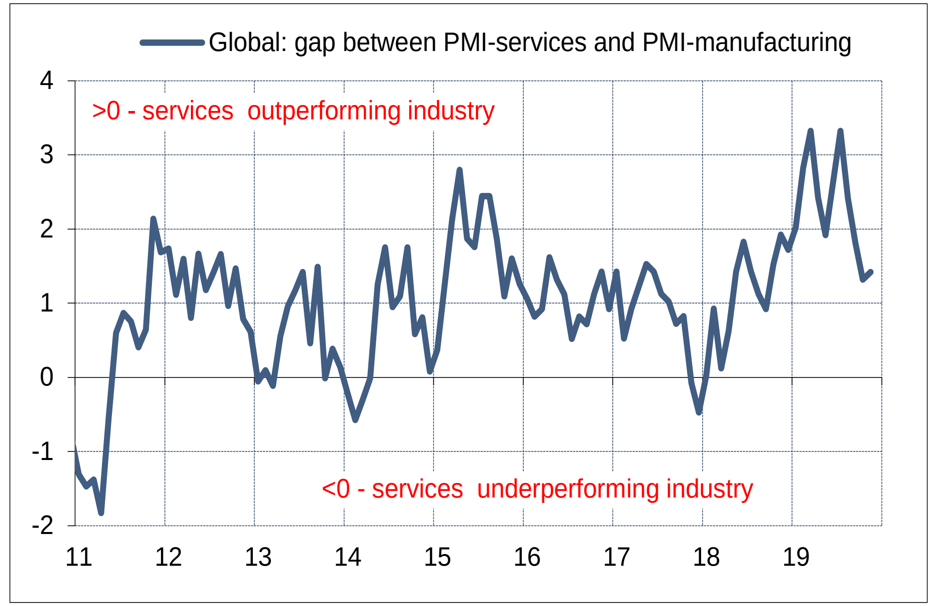

The global PMI-manufacturing index edged above the critical threshold of 50pts in November (50.3) for the first time since April. It has gained one point since its July trough ①.

- The absolute level remains low. From an economic standpoint, being a little above or below this 50-point threshold does not fundamentally change the message of near-stagnant industrial activity (-1% year-on-year in September).
- In the Eurozone (46.9), and especially in Germany (44.1), industrial confidence is starting to stabilise at very low levels, and the manufacturing sector has contracted very sharply (-5% year-on-year in Germany).

Other sectors have continued to post positive growth rates overall during the past two years. Confidence in the services sector remains far higher than in the manufacturing sector ②.

Source: Thomson Reuters, ODDO BHF

Europe: faint glimmers of hope on the inventory cycle

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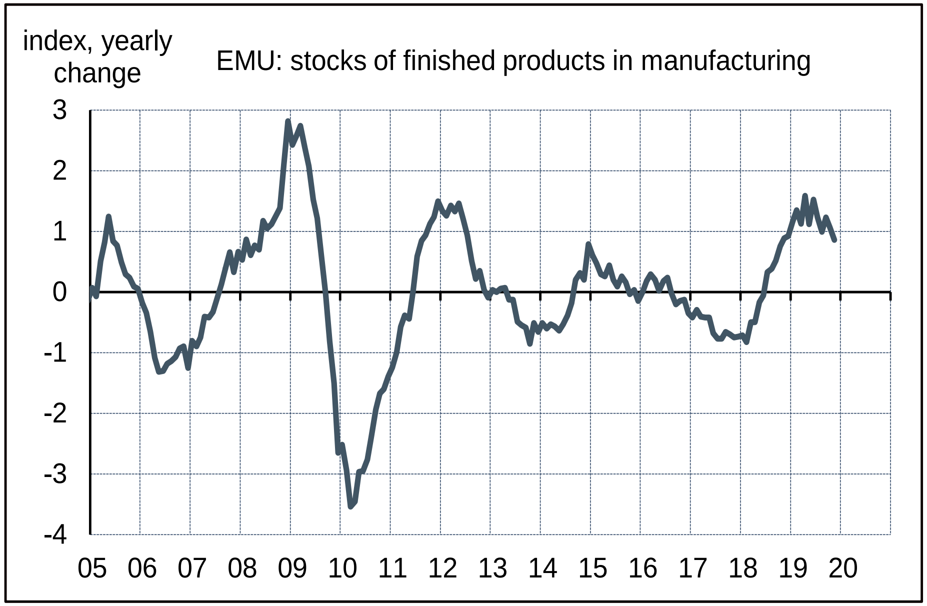

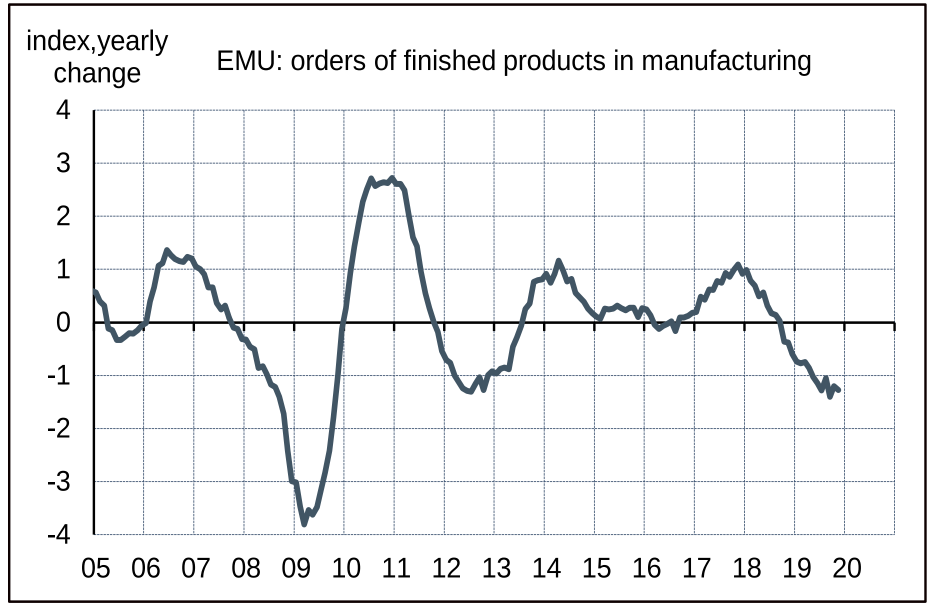

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In 2018 and 2019, the European manufacturing sector faced an unexpected slowdown in demand, in particular external demand, because of uncertainties about global trade. Order books plunged and there was an involuntary accumulation of inventories while production was adjusted.

- It appears that the accumulation of inventories has peaked ①. This is partly reflected in the stabilisation of industrial confidence indicators (PMI and Ifo) in recent months. The build-up of inventories was more pronounced in segments directly or indirectly linked to the automotive sector (chemicals, electrical equipment and metals).
- Order books continue to shrink, especially in Germany, although at a pace that is no longer intensifying ②. It is too soon to say if orders have already bottomed out until we have confirmation that trade strains are stable or, better still, easing.

13/12/2019

Source: Thomson Reuters, ODDO BHF

Europe: confirmation of the robustness of domestic demand

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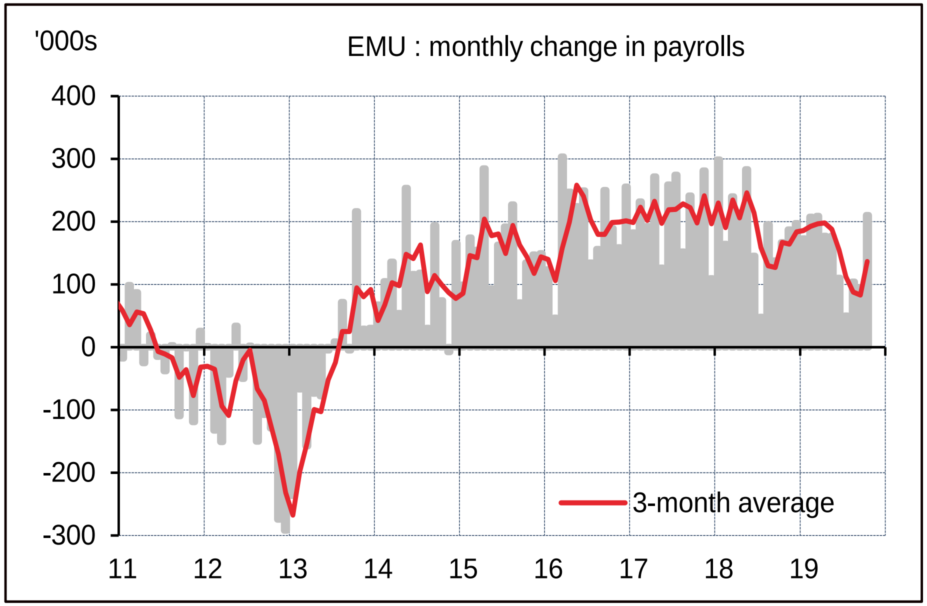

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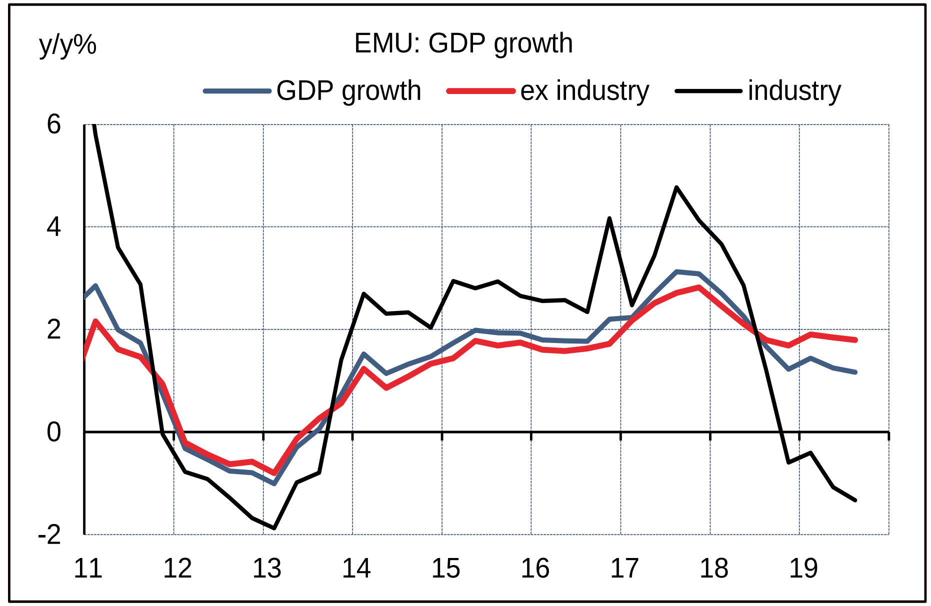

Domestic demand has been boosted by three positive factors: the improvement in employment conditions, credit growth and the stimulating policy mix. None of these factors is about to disappear or weaken.

- The repercussions of the manufacturing recession are visible above all in the business services sector (such as temporary employment), but its total magnitude is limited. On our estimates, monthly job creations in the Eurozone hit a soft patch over the summer, falling below +100k – their lowest level since 2014 – but they have since returned to a more comfortable trend (around 150k) ①.
- For the most part, the slowdown in the pace of economic growth in the Eurozone (from 3% y/y at end-2017 to 1.2% today) is due to the manufacturing sector (with VA growth falling from +4.1% to -1.3%). At the same time, non-manufacturing sectors have barely slowed (with VA growth falling from +2.8% to +1.8%) and their trend has been stable since the end of 2018 ②.

13/12/2019

Source: Thomson Reuters, ODDO BHF

Lesson of 2019 (4)
The limits of the German growth model

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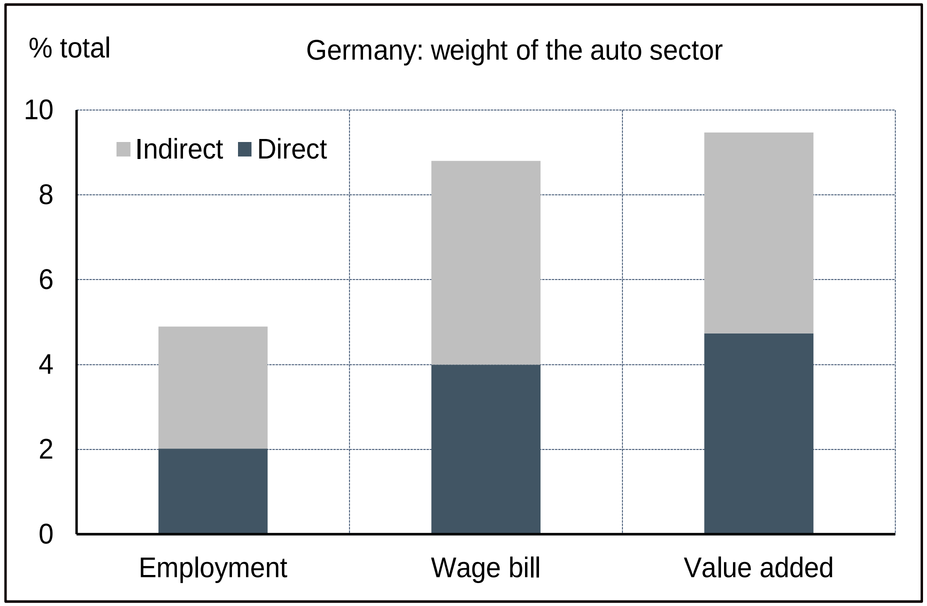

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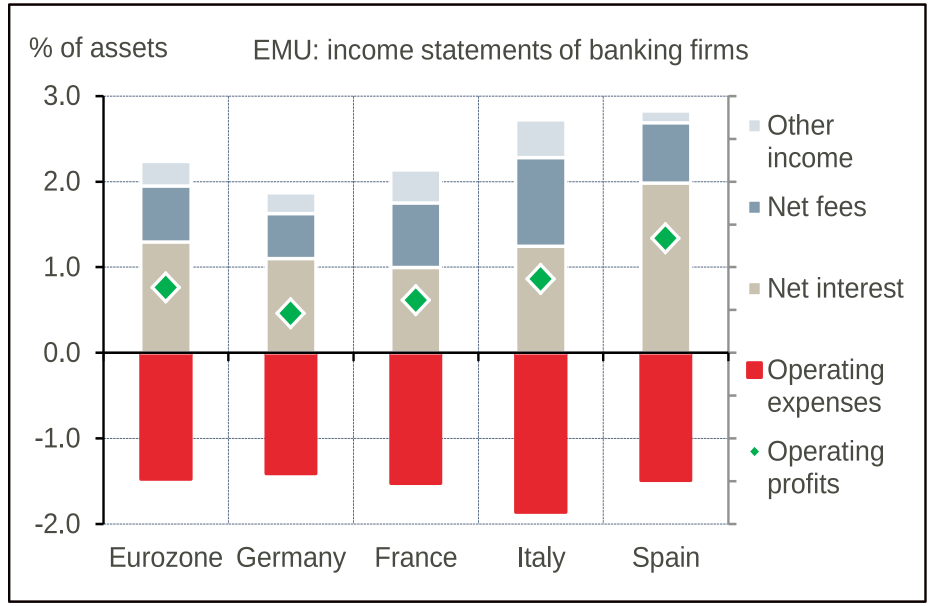

Germany's cyclical weakening since 2017 – largely due to the crisis in the oversized automotive sector ① and the downturn in external trade – has revealed certain weaknesses that could have structural repercussions: insufficient investment spending and the weak profitability of the banking sector ②.

- Germany retains many advantages over other European countries – competitiveness, full employment and low government debt – but its much lauded "growth model" over the past two decades (to simplify, exports of high value-added industrial products to Asia) appears less fitting in a world dominated by moves upmarket by competitors, the slowdown in the Chinese economy, the viscosity of international trade (tariff and non-tariff barriers) and the emphasis on environmental issues (energy mix, electrification/hybridisation of vehicles).
- The sometimes dogmatic attachment to fiscal orthodoxy is a source of incomprehension for many economists (including ourselves).

Source: Thomson Reuters, BCE, ODDO BHF

Lesson of 2019 (5)
Political fragmentation of Europe, with no major gains for "populists"

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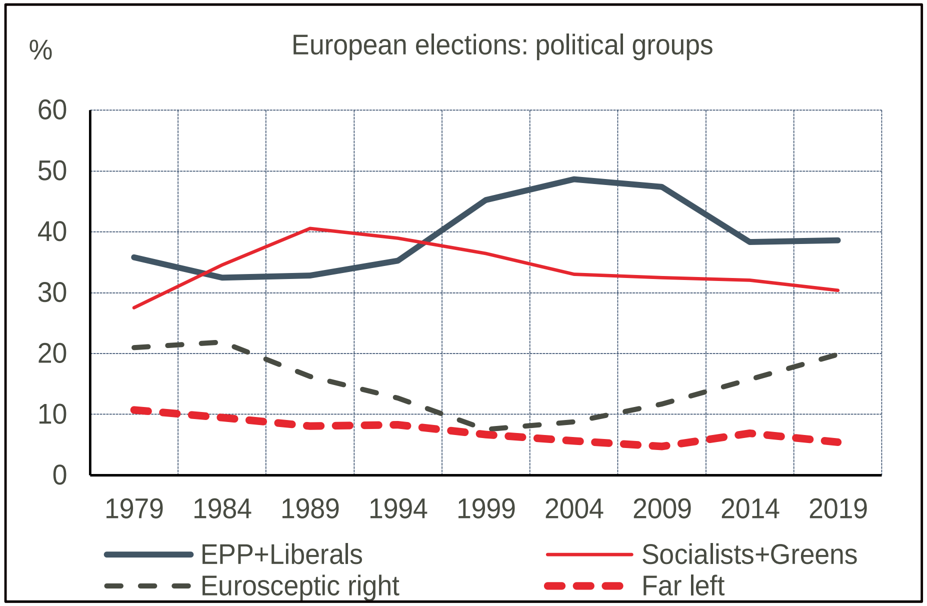

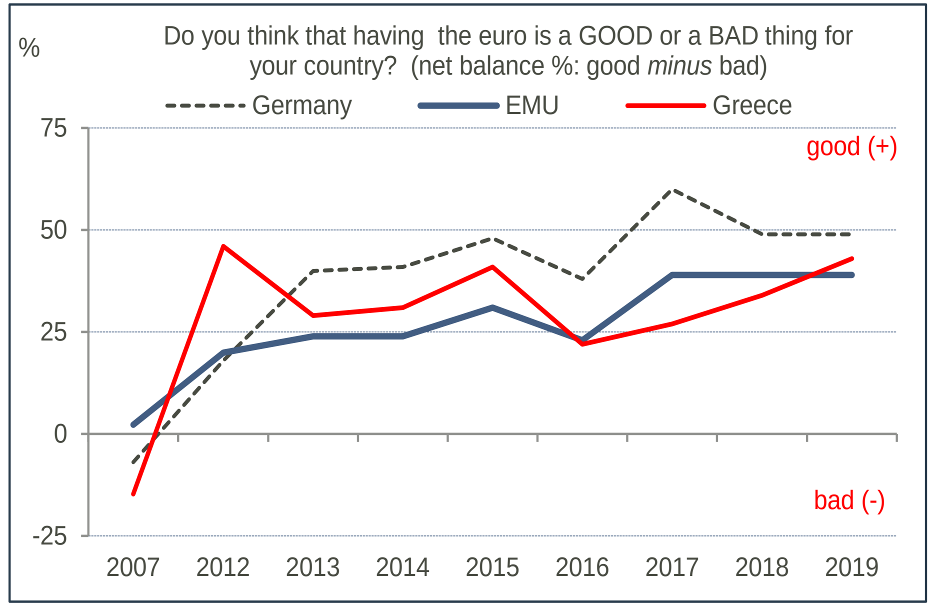

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The right/left divide that was common to most European countries has given way to a fragmentation of political forces. Elections to the European Parliament last May painted the clearest picture of this ①.

- With a few rare exceptions (Italy in 2018), political fragmentation has barely benefited populist or Eurosceptic parties, which remain stuck in an opposition role. Other parties (conservatives, liberals, social-democrats, greens) are being forced to form alliances. Negative effect: this can slow decision taking (the time to form coalitions and negotiate an acceptable compromise). Positive effect: this stops forces seeking Europe's disintegration (fruitless attempts after the Greek crisis in 2015 and the Brexit referendum in 2016).
- Support for the euro has never been as strong since its creation, as it is obvious that there is no credible alternative in the short term ②. Even politicians hostile to the euro (such as Matteo Salvini and Marine Le Pen) accept this.

13/12/2019

Source: EP, EC, ODDO BHF

ODDO BHF

Appendix – statistics and charts

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Appendix 1
Real GDP growth in the major countries (% quarterly change)

	GDP 2017 bn $	Weights 2016 current $ %	Weights 2016 PPP $ %	Real GDP change (Q/Q non annualised, %) 2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
World *	**80322**	100.0	100.0	**0.74**	**1.03**	**1.08**	**0.91**	**0.90**	**0.90**	**0.88**	**0.65**	**0.88**	**0.97**	**0.78**	**1.01**	**1.04**	**1.02**	**1.12**	**1.01**	**0.98**	**0.93**	**0.76**	**0.66**	**0.81**	**0.78**	**0.76**
Developed countries	42505	52.9	35.3	0.22	0.51	0.78	0.52	0.76	0.50	0.36	0.17	0.52	0.35	0.48	0.58	0.67	0.58	0.73	0.72	0.36	0.62	0.37	0.29	0.61	0.37	0.40
Asia excl.Japan	19697	24.5	33.9	1.37	1.84	1.61	1.38	1.53	1.68	1.63	1.36	1.57	1.86	1.46	1.34	1.46	1.58	1.73	1.44	1.53	1.47	1.34	1.38	1.19	1.26	1.16
US	19519	24.3	15.3	-0.3	1.4	1.2	0.6	0.8	0.7	0.3	0.0	0.5	0.5	0.5	0.5	0.6	0.5	0.8	0.9	0.6	0.9	0.7	0.3	0.8	0.5	0.5
EMU	11769	14.7	10.7	0.5	0.2	0.5	0.4	0.7	0.4	0.5	0.4	0.6	0.3	0.5	0.8	0.6	0.7	0.8	0.8	0.3	0.3	0.2	0.3	0.4	0.2	0.2
- Germany	3665	4.6	3.3	1.0	0.0	0.5	0.9	-0.2	0.6	0.5	0.4	0.8	0.6	0.2	0.4	1.2	0.6	0.9	0.7	0.1	0.4	-0.1	0.2	0.5	-0.2	0.1
- France	2592	3.2	2.2	0.1	0.2	0.5	0.1	0.4	0.0	0.4	0.2	0.6	-0.3	0.3	0.6	0.8	0.7	0.7	0.7	0.2	0.2	0.3	0.4	0.3	0.3	0.3
- Italy	1951	2.4	1.8	0.1	0.0	0.1	-0.2	0.2	0.4	0.2	0.5	0.3	0.2	0.6	0.3	0.6	0.4	0.4	0.5	0.1	-0.1	-0.1	0.1	0.1	0.1	0.1
Japan	4860	6.1	4.2	1.0	-1.9	0.1	0.5	1.4	0.1	0.0	-0.4	0.5	0.2	0.3	0.2	1.1	0.4	0.7	0.3	-0.5	0.5	-0.6	0.3	0.6	0.5	0.4
UK	2640	3.3	2.3	0.7	0.7	0.6	0.6	0.5	0.7	0.4	0.7	0.2	0.5	0.5	0.6	0.6	0.3	0.3	0.4	0.1	0.5	0.6	0.3	0.6	-0.2	0.3
Switzerland	680	0.8	0.4	0.7	0.6	0.8	0.8	-0.3	0.0	0.6	0.4	0.4	0.5	0.6	0.4	0.1	0.7	0.7	1.0	1.0	0.8	-0.3	-0.1	0.4	0.3	0.4
Canada	1650	2.1	1.4	0.2	0.9	1.0	0.7	-0.5	-0.3	0.4	0.1	0.5	-0.5	1.0	0.6	1.2	1.2	0.4	0.4	0.5	0.4	0.6	0.2	0.2	0.9	0.3
Australia	1387	1.7	1.0	0.7	0.5	0.5	0.4	0.9	0.1	1.1	0.5	0.9	0.7	0.1	1.0	0.4	0.6	1.0	0.5	0.9	0.7	0.3	0.2	0.5	0.6	0.4
China	12062	15.0	18.1	1.8	1.8	1.8	1.7	1.8	1.8	1.7	1.5	1.4	1.9	1.7	1.6	1.5	1.8	1.7	1.5	1.5	1.7	1.6	1.5	1.4	1.6	1.5
Hong Kong	342	0.4	0.4	0.9	-0.2	1.5	0.4	0.6	0.6	0.5	0.1	-0.1	1.3	1.0	1.2	0.8	0.8	0.8	1.1	1.9	-0.3	0.1	-0.5	1.3	-0.5	-3.2
India **	2652	3.3	7.5	0.8	2.8	1.8	1.0	1.6	2.6	2.0	1.5	2.8	2.6	1.5	0.9	1.8	1.6	2.2	2.0	1.9	1.6	1.4	1.6	1.2	0.8	0.9
Korea	1624	2.0	1.7	0.9	0.7	0.4	0.6	0.9	0.2	1.5	0.7	0.4	1.0	0.5	0.8	0.9	0.5	1.5	-0.1	1.0	0.6	0.5	0.9	-0.4	1.0	0.4
Indonesia **	1015	1.3	2.5	1.2	1.2	1.3	1.2	1.1	1.1	1.3	1.4	1.1	1.3	1.2	1.2	1.3	1.2	1.3	1.3	1.2	1.4	1.2	1.3	1.1	1.3	1.2
Taiwan	575	0.7	0.9	0.6	1.2	1.1	0.5	0.6	-1.4	-0.1	0.0	0.8	0.9	0.4	0.9	0.8	0.5	1.2	0.8	0.7	0.4	0.4	0.3	0.8	0.7	0.9
Thailand	455	0.6	1.0	-0.4	0.6	1.0	1.2	0.4	0.4	1.5	0.8	0.7	0.7	0.9	0.9	1.0	1.3	1.3	0.4	1.9	1.0	0.0	0.8	1.0	0.4	0.1
Malaysia **	319	0.4	0.7	1.1	1.8	1.2	1.4	1.4	1.0	0.9	1.2	1.0	1.1	1.2	1.4	1.6	1.4	1.5	1.0	1.2	0.7	1.4	1.3	1.0	1.1	0.8
Philippines	314	0.4	0.7	2.4	1.6	0.8	1.6	1.2	2.0	1.2	2.1	1.5	1.9	1.2	1.8	1.4	2.0	1.6	1.5	1.4	1.6	1.2	2.0	0.7	1.4	1.6
Singapore	338	0.4	0.4	0.7	1.1	0.8	1.5	-0.5	1.2	1.2	0.1	0.6	0.8	0.7	1.7	0.3	0.4	2.0	0.9	1.2	0.2	0.2	-0.2	0.9	-0.7	0.5
Brazil	2053	2.6	2.5	0.5	-1.3	0.2	0.4	-1.1	-2.2	-1.4	-0.8	-0.9	-0.2	-0.7	-0.5	1.6	0.4	0.1	0.3	0.7	0.0	0.5	0.1	0.0	0.5	0.6
Chile	278	0.3	0.4	0.0	0.4	0.0	1.3	0.1	1.1	-0.2	1.1	0.6	-0.4	0.5	0.1	-0.7	0.8	2.2	0.9	1.3	0.6	0.0	1.4	0.0	0.7	0.7
Mexico	1157	1.4	1.9	0.6	1.3	0.4	1.1	0.5	1.0	1.2	0.0	0.6	0.4	1.1	1.1	0.5	0.3	-0.2	1.1	1.3	-0.2	0.4	-0.1	-0.1	-0.1	0.0
Russia **	1579	2.0	3.2	-0.8	1.2	-0.4	0.2	-2.8	-0.4	0.2	-0.1	-0.2	-0.4	0.2	0.9	0.8	0.5	0.1	-0.8	2.1	0.6	0.3	-0.2	-0.1	0.8	1.2
Poland	527	0.7	0.9	1.1	1.1	0.8	0.6	1.2	0.7	1.2	1.2	-0.2	1.3	0.2	2.2	1.1	1.0	1.2	1.5	1.3	1.3	1.3	0.4	1.5	0.8	1.3
Turkey	853	1.1	1.7	2.7	-1.5	2.4	1.5	1.9	1.4	1.6	0.6	0.5	1.1	-3.1	5.8	1.5	1.7	1.8	2.4	1.2	-0.1	-1.4	-2.6	1.7	1.0	0.4
South Africa	349	0.4	0.6	-0.6	0.3	0.6	1.1	0.5	-0.7	0.1	0.3	-0.4	0.8	0.2	0.1	-0.1	0.8	0.7	0.8	-0.7	-0.1	0.5	0.4	-0.9	0.7	-0.1

* as usual, w orld w eighting is based on real GDP at PPP exchange rate (IMF data)
** for those countries, seasonaly-adjusted figures by ODDO BHF

Source: Thomson Reuters, ODDO BHF

Appendix 2
Contributions to real GDP growth: G7 countries

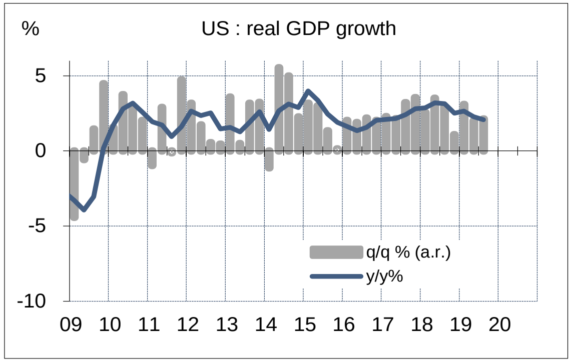
Real GDP change (Q/Q non annualised, %) and contributions to growth *

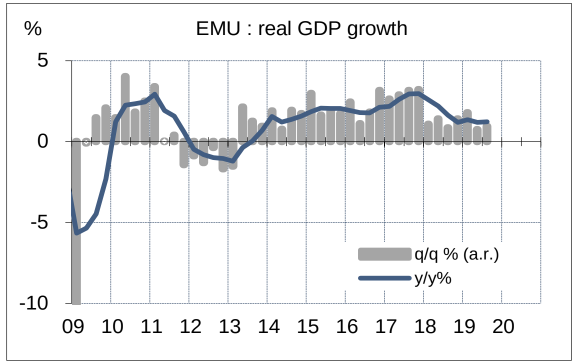
	Pre-crisis	Crisis	Post-crisis	2014				2015				2016				2017				2018				2019		
	1999-2007	Q3 08-Q2 09	2010 to date	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
US																										
Real GDP qoq %	**0.7**	**-1.0**	**0.6**	**-0.3**	**1.4**	**1.2**	**0.6**	**0.8**	**0.7**	**0.3**	**0.0**	**0.5**	**0.5**	**0.5**	**0.5**	**0.6**	**0.5**	**0.8**	**0.9**	**0.6**	**0.9**	**0.7**	**0.3**	**0.8**	**0.5**	**0.5**
- Inventories	0.0	-0.3	0.0	-0.4	0.3	0.0	-0.2	0.5	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	0.3	-0.2	0.0	0.3	-0.2	0.0	-0.3	0.5	0.0	0.1	-0.2	0.0
- Net exports	-0.1	0.3	-0.1	-0.3	-0.1	0.0	-0.3	-0.4	0.0	-0.3	-0.1	-0.1	0.1	0.0	-0.3	0.0	-0.1	0.1	-0.2	0.0	0.2	-0.5	-0.1	0.2	-0.2	0.0
- Final demand	0.8	-1.0	0.6	0.3	1.2	1.2	1.0	0.7	0.8	0.7	0.3	0.8	0.6	0.7	0.5	0.7	0.6	0.5	1.2	0.6	1.0	0.7	0.3	0.5	0.9	0.5
Japan																										
Real GDP qoq %	**0.3**	**-1.6**	**0.3**	**1.0**	**-1.9**	**0.1**	**0.5**	**1.4**	**0.1**	**0.0**	**-0.4**	**0.5**	**0.2**	**0.3**	**0.2**	**1.1**	**0.4**	**0.7**	**0.3**	**-0.5**	**0.5**	**-0.6**	**0.3**	**0.6**	**0.5**	**0.4**
- Inventories	0.0	-0.5	0.0	-0.4	0.9	-0.4	-0.3	0.3	0.5	-0.3	-0.1	0.0	0.4	-0.5	-0.3	0.2	0.0	0.5	0.1	-0.4	-0.1	0.3	0.0	0.1	-0.1	-0.2
- Net exports	0.1	-0.4	0.0	-0.1	0.9	0.0	0.3	0.0	-0.1	-0.1	0.0	0.3	0.1	0.3	0.3	0.1	-0.3	0.6	-0.1	0.0	0.0	-0.1	-0.5	0.4	-0.3	-0.2
- Final demand	0.2	-0.7	0.3	1.6	-3.7	0.5	0.4	1.0	-0.2	0.3	-0.3	0.2	-0.4	0.4	0.2	0.8	0.7	-0.4	0.3	-0.1	0.6	-0.8	0.7	0.1	0.9	0.8
Germany																										
Real GDP qoq %	**0.4**	**-1.7**	**0.5**	**1.0**	**0.0**	**0.5**	**0.9**	**-0.2**	**0.6**	**0.5**	**0.4**	**0.8**	**0.6**	**0.2**	**0.4**	**1.2**	**0.6**	**0.9**	**0.7**	**0.1**	**0.4**	**-0.1**	**0.2**	**0.5**	**-0.2**	**0.1**
- Inventories	0.0	-0.5	0.0	0.5	0.4	-0.8	0.2	0.0	-0.5	0.1	0.1	0.1	-0.1	-0.1	0.7	-0.1	0.2	-0.2	0.1	-0.2	0.2	0.7	-0.1	-0.9	0.2	-0.7
- Net exports	0.2	-0.9	0.0	-0.2	-0.3	0.6	0.1	-0.4	0.6	-0.4	-0.5	-0.4	0.7	-0.2	-0.6	0.7	-0.2	0.5	0.1	0.1	-0.2	-1.0	-0.2	0.5	-0.6	0.5
- Final demand	0.2	-0.3	0.4	0.7	-0.1	0.7	0.6	0.2	0.5	0.8	0.8	1.1	0.0	0.5	0.3	0.6	0.6	0.6	0.5	0.2	0.4	0.2	0.5	0.9	0.2	0.3
France																										
Real GDP qoq %	**0.6**	**-0.9**	**0.3**	**0.1**	**0.2**	**0.5**	**0.1**	**0.4**	**0.0**	**0.4**	**0.2**	**0.6**	**-0.3**	**0.3**	**0.6**	**0.8**	**0.7**	**0.7**	**0.7**	**0.2**	**0.2**	**0.3**	**0.4**	**0.3**	**0.3**	**0.3**
- Inventories	0.0	-0.4	0.0	0.4	0.2	0.1	-0.1	0.2	-0.4	0.5	0.3	-0.3	-0.6	0.4	-0.4	0.8	-0.5	0.1	0.0	0.0	0.2	-0.4	-0.2	0.3	-0.2	0.1
- Net exports	-0.1	0.0	0.0	0.0	-0.4	0.0	0.0	-0.2	0.4	-0.6	-0.4	0.1	0.2	-0.4	0.2	-0.7	0.8	-0.2	0.4	0.1	-0.1	0.3	0.2	-0.3	0.1	-0.4
- Final demand	0.6	-0.4	0.3	-0.3	0.3	0.4	0.2	0.5	0.0	0.5	0.3	0.9	0.1	0.2	0.8	0.7	0.5	0.8	0.3	0.1	0.1	0.5	0.4	0.3	0.4	0.5
Italy																										
Real GDP qoq %	**0.4**	**-1.7**	**0.0**	**0.1**	**0.0**	**0.1**	**-0.2**	**0.2**	**0.4**	**0.2**	**0.5**	**0.3**	**0.2**	**0.6**	**0.3**	**0.6**	**0.4**	**0.4**	**0.5**	**0.1**	**-0.1**	**-0.1**	**0.1**	**0.1**	**0.1**	**0.1**
- Inventories	0.0	-0.4	0.0	0.2	0.5	-0.2	-1.1	0.6	-0.3	0.4	0.0	0.1	0.2	0.0	-0.1	-0.2	0.6	-0.3	0.3	-0.3	0.1	-0.3	0.1	-0.9	-0.1	0.3
- Net exports	0.0	-0.3	0.1	0.0	-0.3	0.0	0.6	-0.6	0.0	-0.3	0.2	-0.5	-0.1	0.0	0.0	0.6	-0.5	0.1	-0.1	0.0	-0.4	0.3	-0.2	0.6	0.0	-0.4
- Final demand	0.4	-1.0	0.0	-0.1	-0.2	0.3	0.4	0.2	0.7	0.2	0.3	0.6	0.0	0.5	0.5	0.2	0.4	0.5	0.3	0.3	0.2	-0.1	0.2	0.5	0.1	0.2
EMU																										
Real GDP qoq %	**0.6**	**-1.4**	**0.3**	**0.5**	**0.2**	**0.5**	**0.4**	**0.7**	**0.4**	**0.5**	**0.4**	**0.6**	**0.3**	**0.5**	**0.8**	**0.6**	**0.7**	**0.8**	**0.8**	**0.3**	**0.3**	**0.2**	**0.3**	**0.4**	**0.2**	**0.2**
- Inventories	0.0	-0.4	0.0	0.4	0.3	-0.2	-0.1	0.2	-0.3	0.3	0.0	0.1	-0.2	0.0	0.2	0.1	0.1	-0.2	0.0	0.1	0.0	0.2	-0.2	-0.2	-0.1	-0.1
- Net exports	0.0	-0.2	0.1	0.0	-0.1	0.2	0.2	0.2	-1.2	0.8	-0.5	-0.1	0.0	0.1	-0.2	0.6	-1.1	1.6	0.3	-0.1	-0.1	-0.3	-0.1	0.3	-1.2	-0.1
- Final demand	0.5	-0.8	0.3	0.1	0.0	0.5	0.4	0.3	1.8	-0.6	0.9	0.7	0.4	0.4	0.7	-0.1	1.8	-0.5	0.4	0.3	0.4	0.3	0.6	0.4	1.4	0.4
UK																										
Real GDP qoq %	**0.7**	**-1.4**	**0.5**	**0.7**	**0.7**	**0.6**	**0.6**	**0.5**	**0.7**	**0.4**	**0.7**	**0.2**	**0.5**	**0.5**	**0.6**	**0.6**	**0.3**	**0.3**	**0.4**	**0.1**	**0.5**	**0.6**	**0.3**	**0.6**	**-0.2**	**0.3**
- Inventories	0.0	0.0	0.0	-1.1	0.1	-0.1	0.4	0.4	-1.3	0.1	1.0	-1.0	-0.7	1.1	-1.0	-0.1	-0.2	0.0	0.1	-0.2	1.2	-0.4	0.6	2.8	-2.9	-1.2
- Net exports	0.0	0.0	0.0	0.8	0.2	0.0	-0.2	-0.8	0.9	-0.2	-0.3	-0.1	0.3	-1.6	1.4	0.3	0.0	0.1	-0.1	0.1	-0.9	0.7	-0.7	-2.7	2.5	1.2
- Final demand	0.8	-1.4	0.5	0.9	0.4	0.7	0.4	1.0	1.1	0.5	0.0	1.2	1.0	1.0	0.2	0.3	0.4	0.2	0.4	0.1	0.2	0.3	0.4	0.5	0.2	0.3

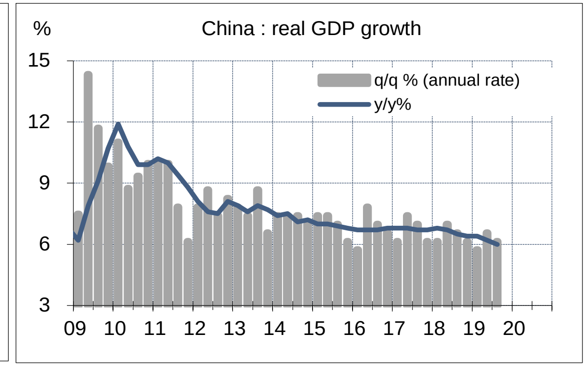
** do not sum up exactly due to roundings*

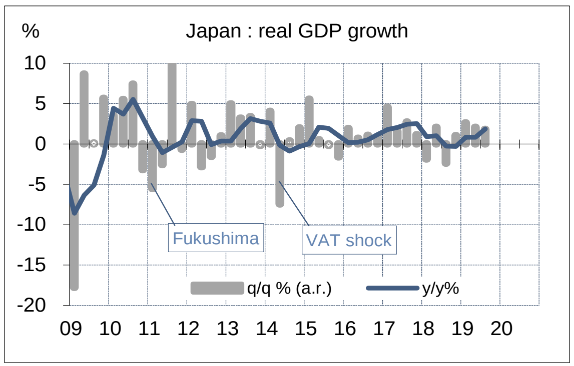
Source: Thomson Reuters, ODDO BHF

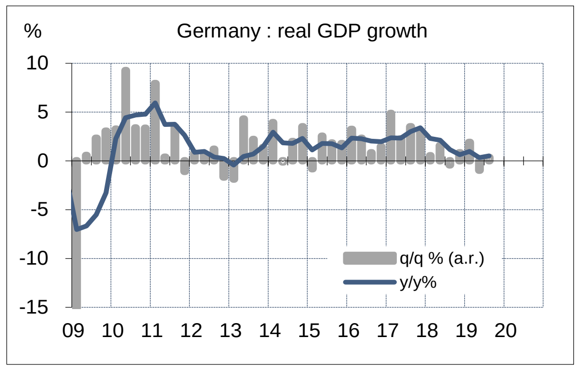
Appendix 3
Real GDP growth: G7 countries + China

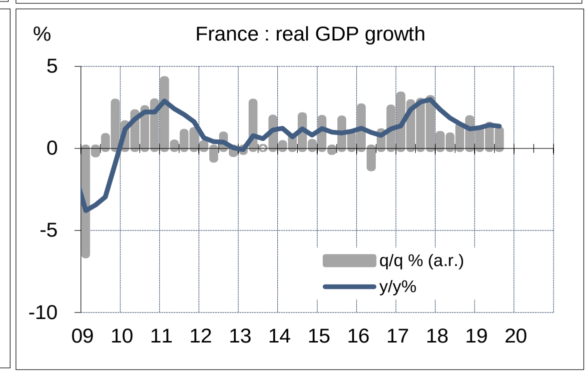


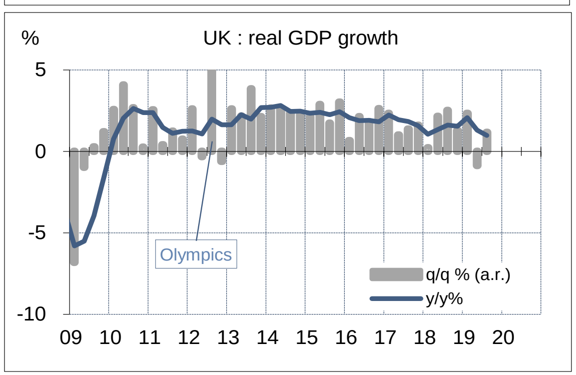


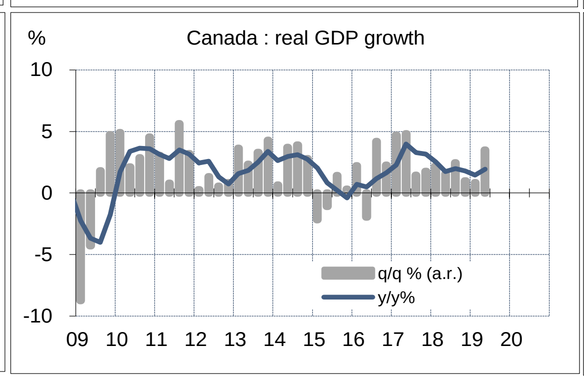


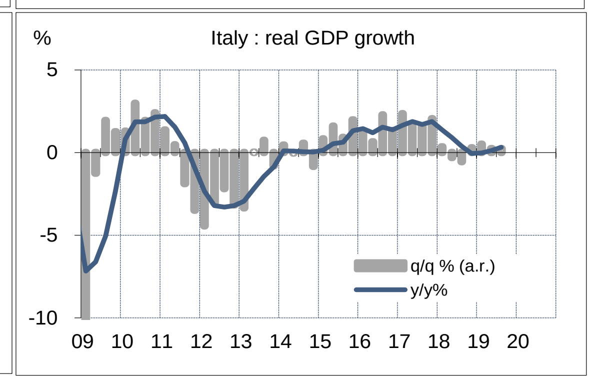








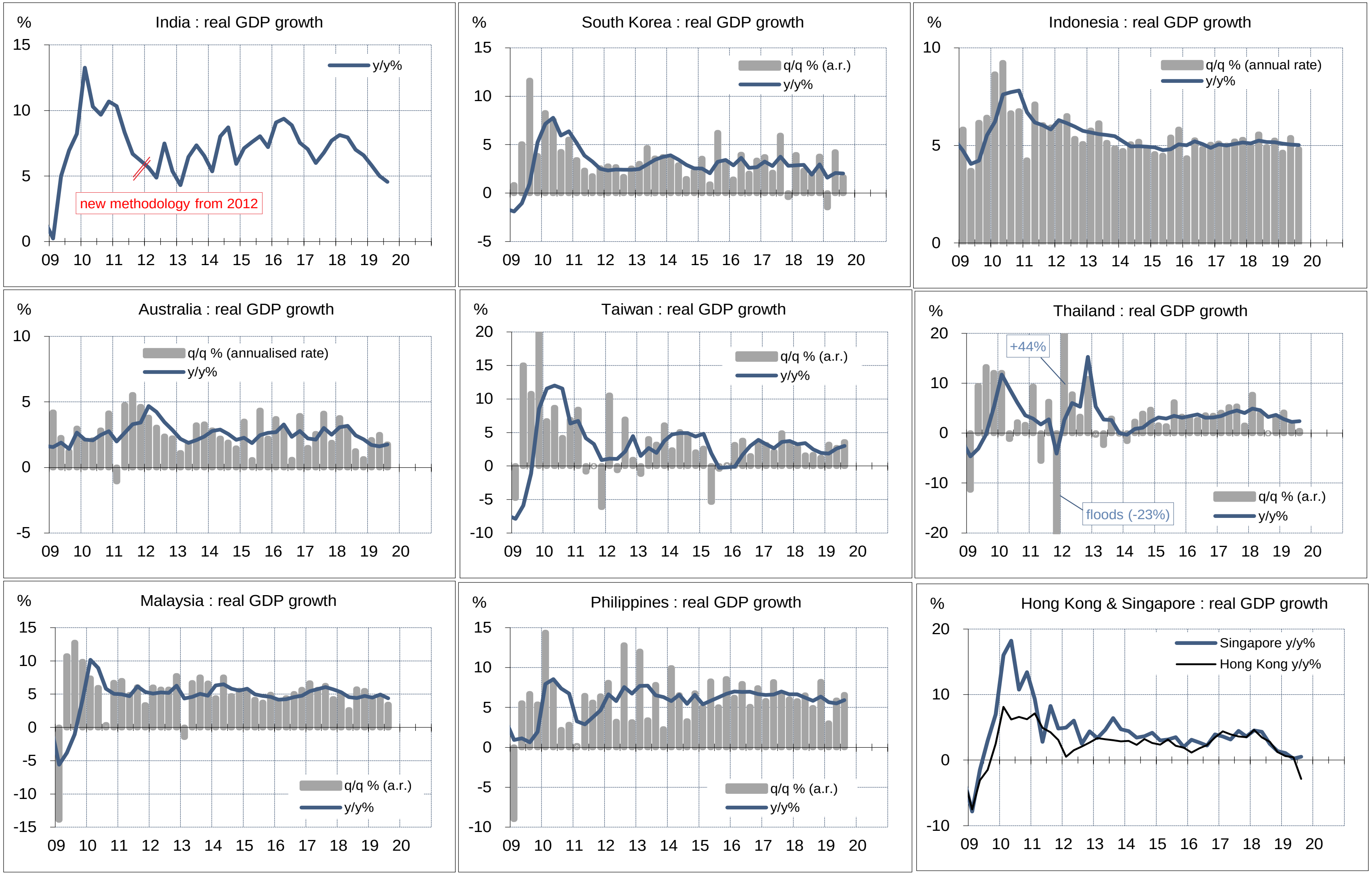




13/12/2019

Source: Thomson Reuters, ODDO BHF

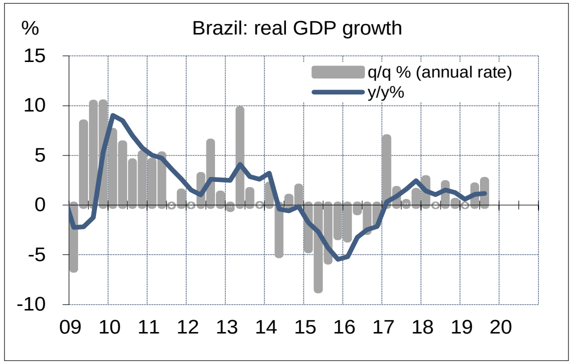
Appendix 4
Real GDP growth: countries of Asia excl. China-Japan (selection)

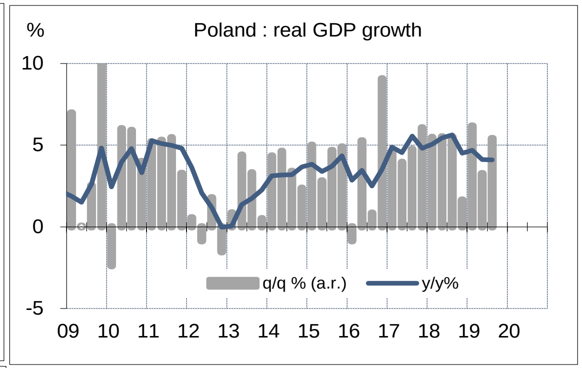


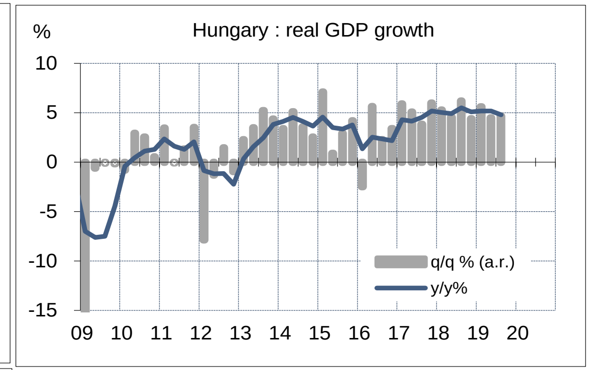
13/12/2019

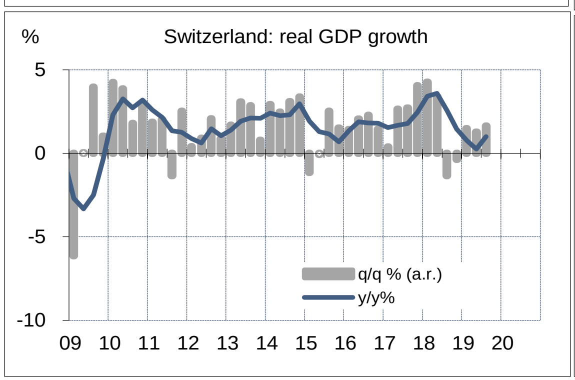
Source: Thomson Reuters, ODDO BHF

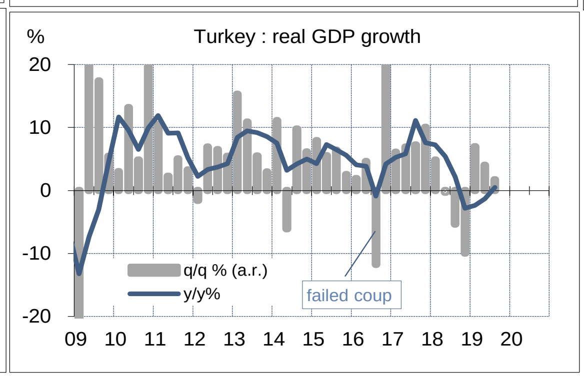
Appendix 5
Real GDP growth: other countries (selection)

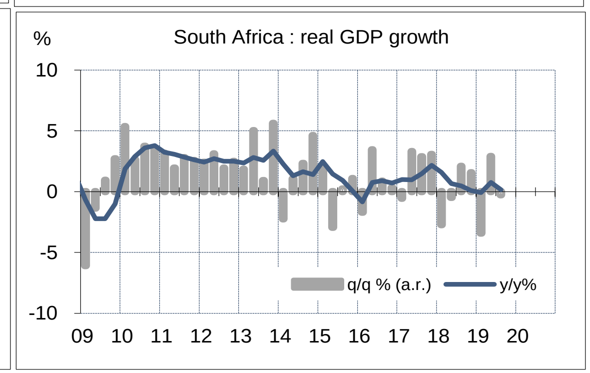








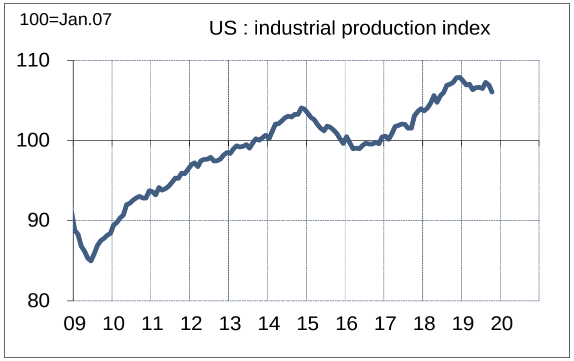


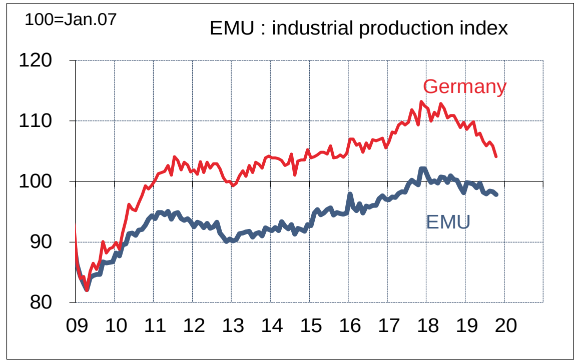


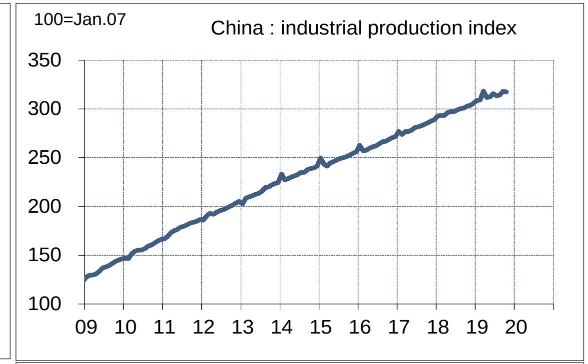
13/12/2019

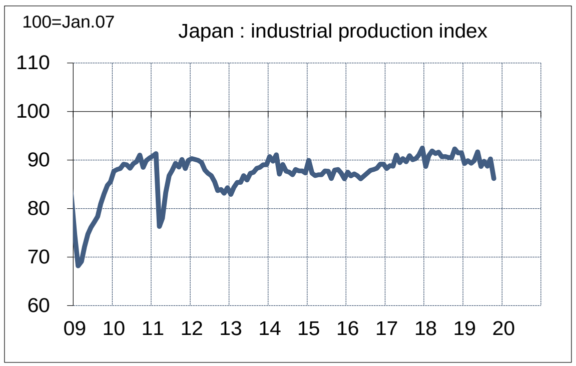
Source: Thomson Reuters, ODDO BHF

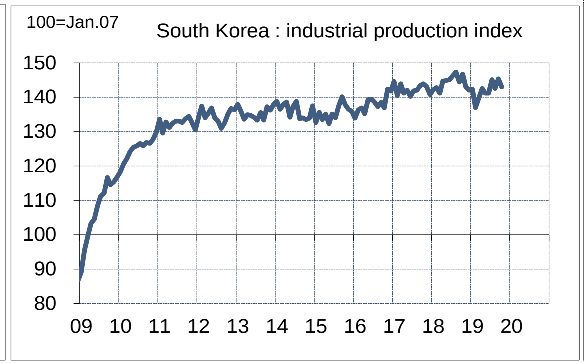
Appendix 6
Industrial production (index): selected countries

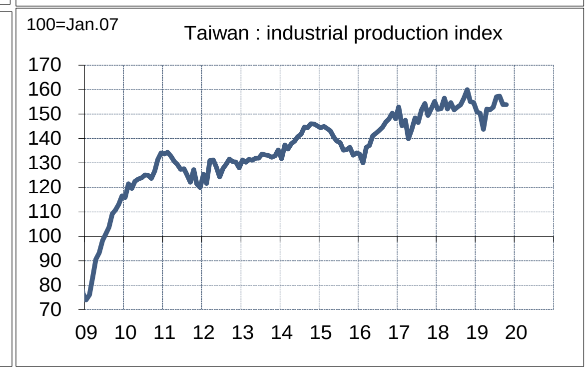


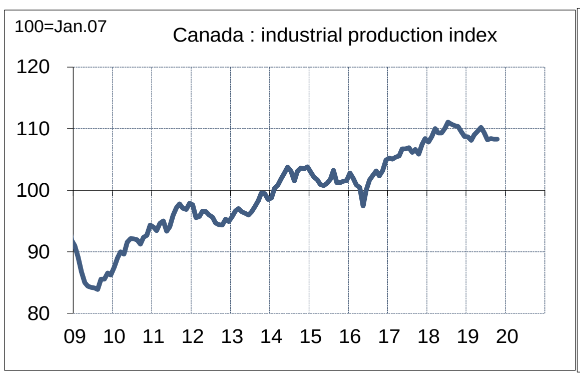


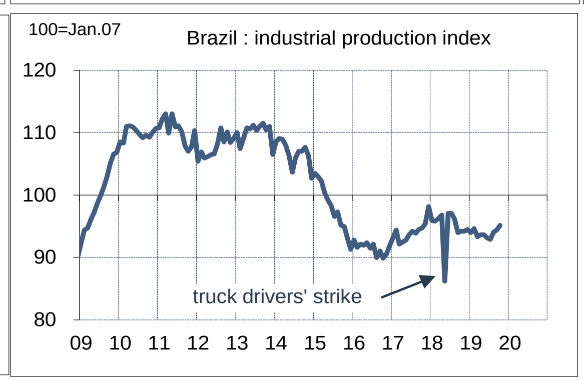








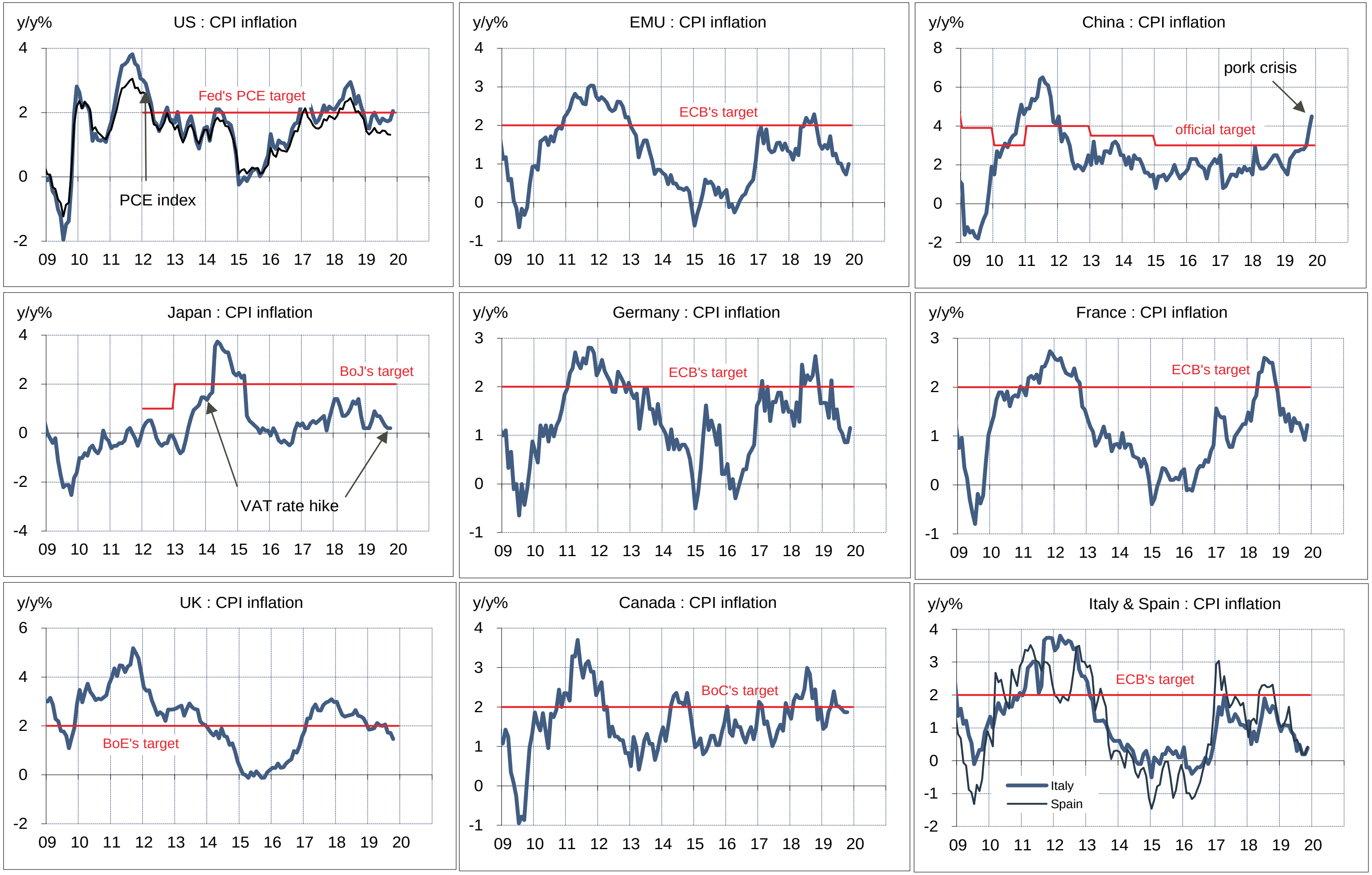




13/12/2019

Source: Thomson Reuters, ODDO BHF

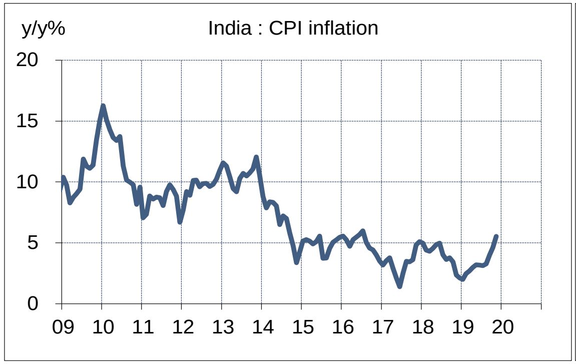
Appendix 7
Consumer price inflation: G7 countries + China

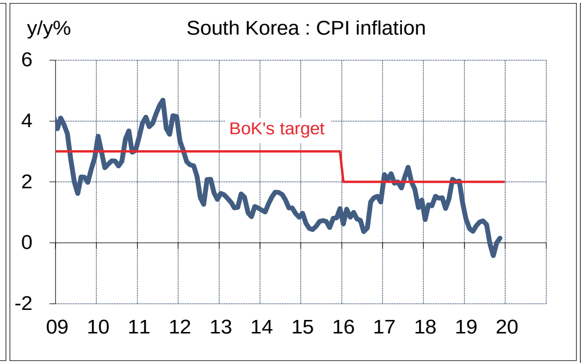


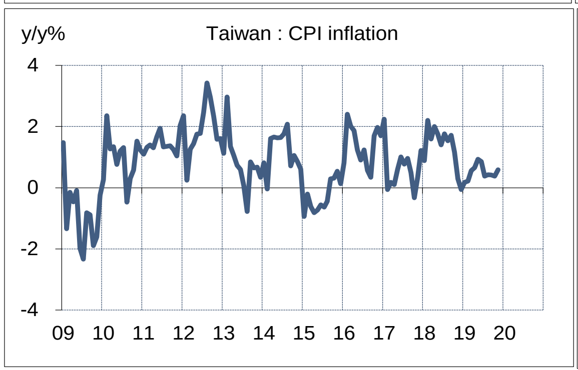
Source: Thomson Reuters, ODDO BHF

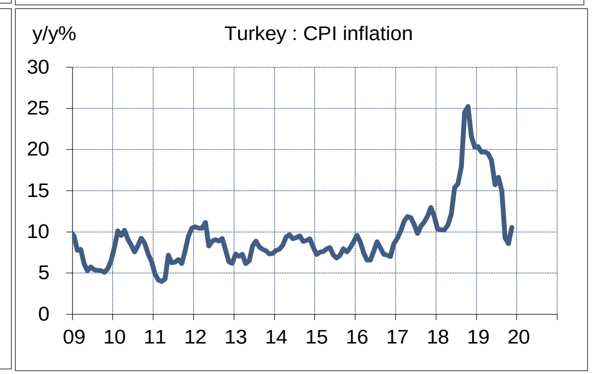
13/12/2019

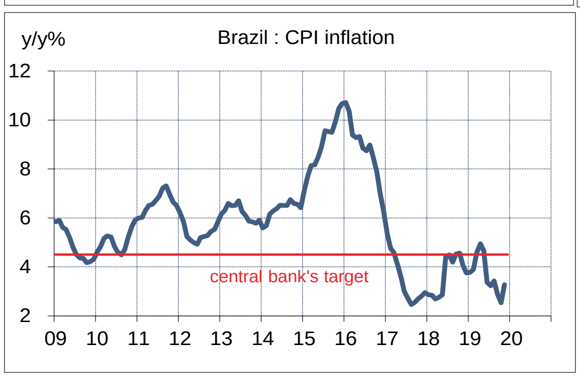
Appendix 8
Consumer price inflation: emerging countries (selection)







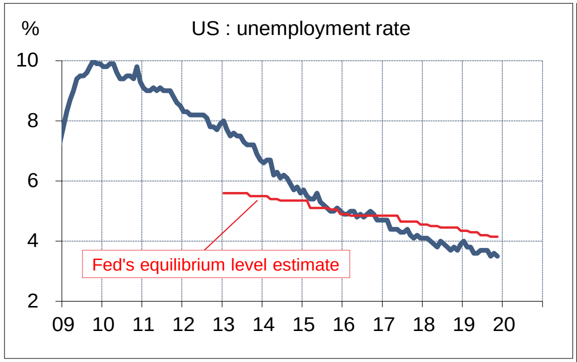


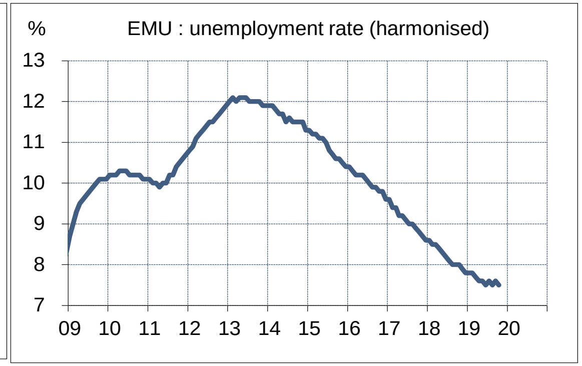


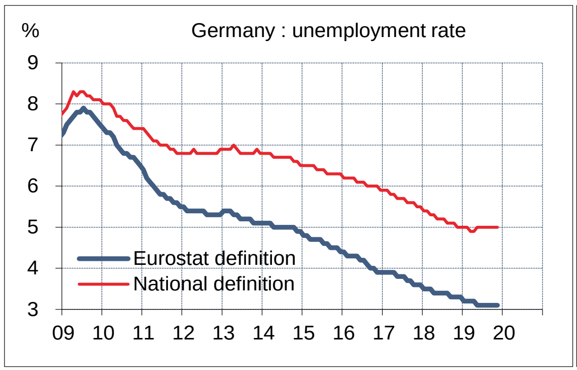
13/12/2019

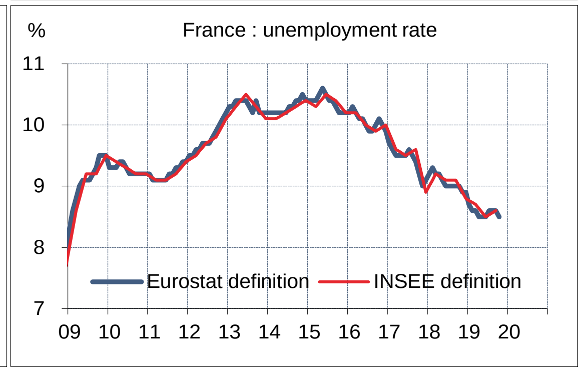
Source: Thomson Reuters, ODDO BHF

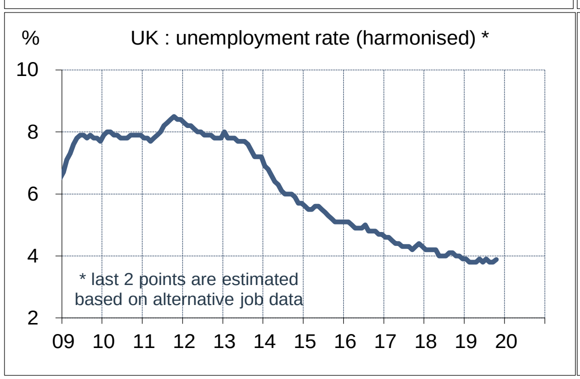
Appendix 9
Unemployment rates: G7 countries

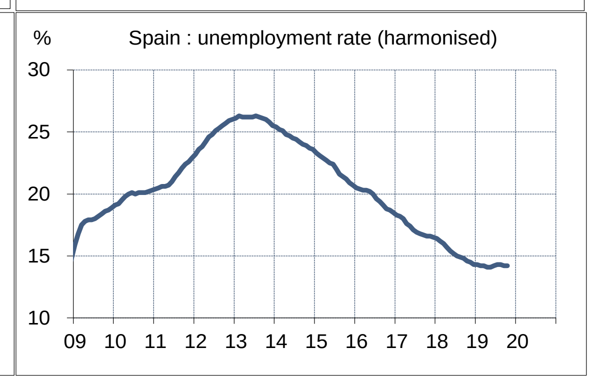






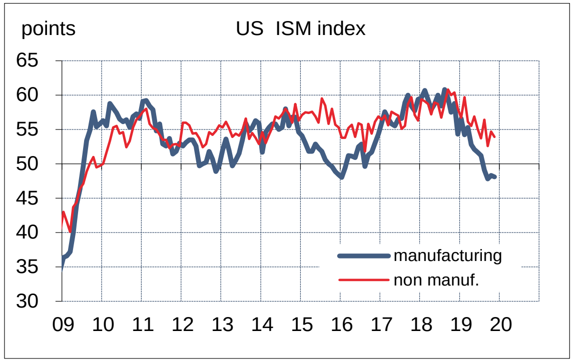


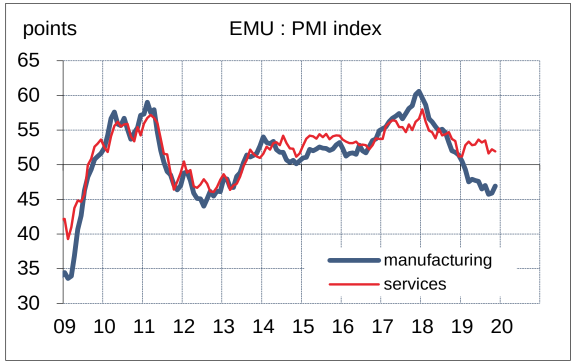


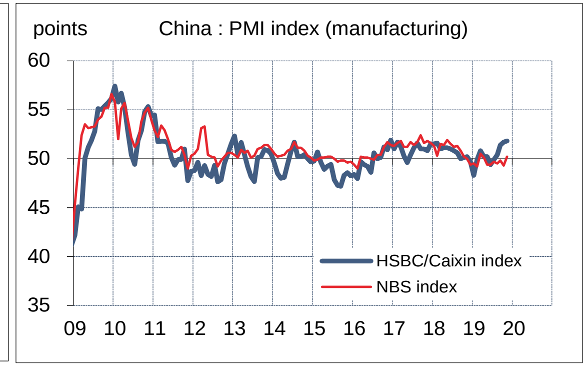


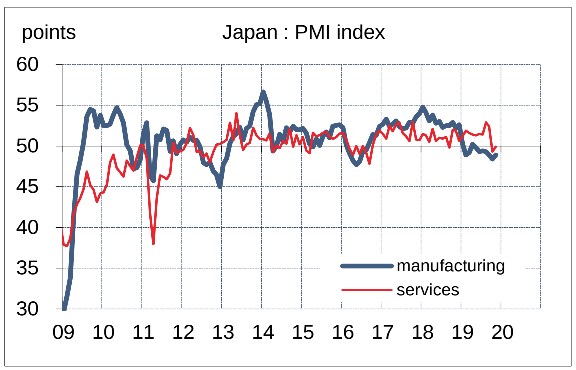
Source: Thomson Reuters, ODDO BHF

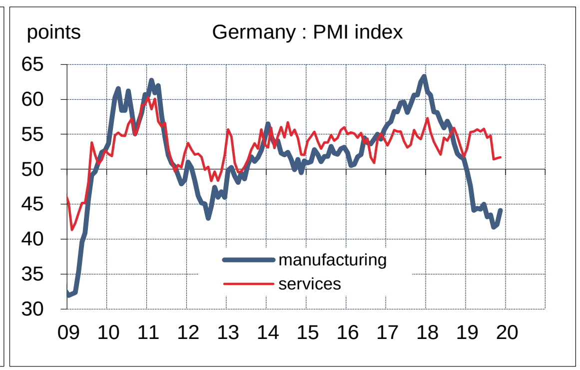
Appendix 10
Purchasing managers’ confidence (PMI indices): G7 + BRIC countries

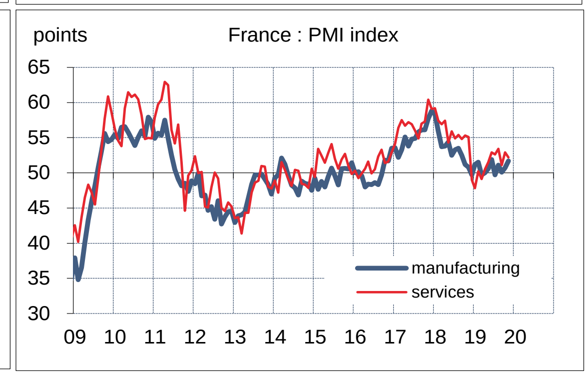


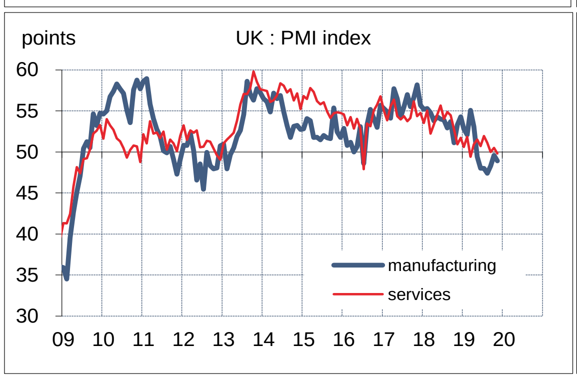


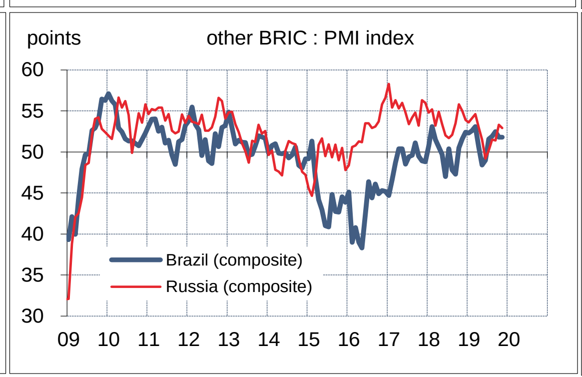


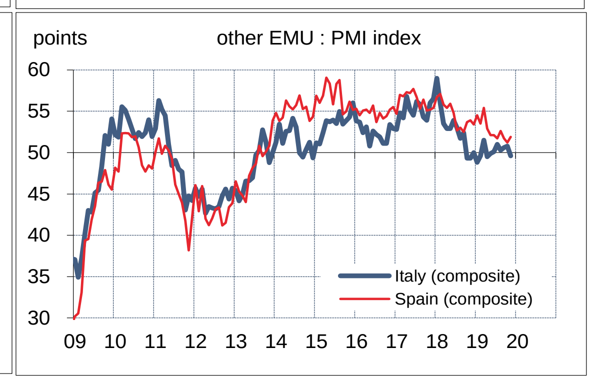








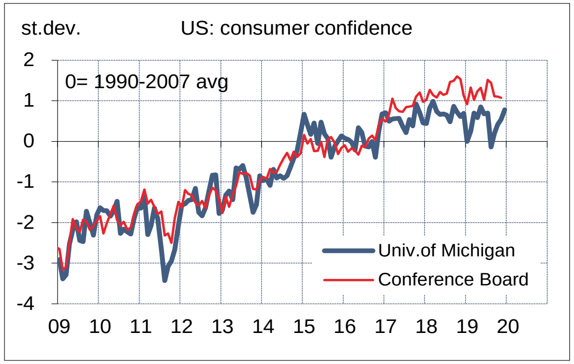


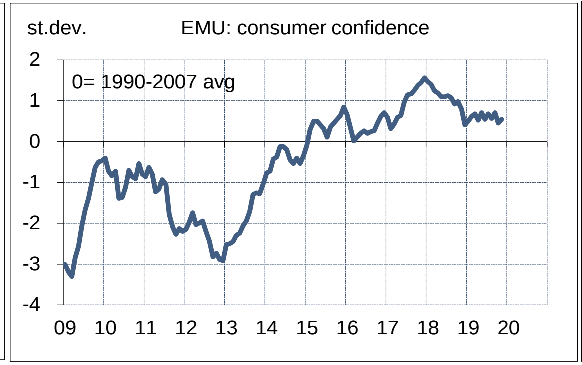


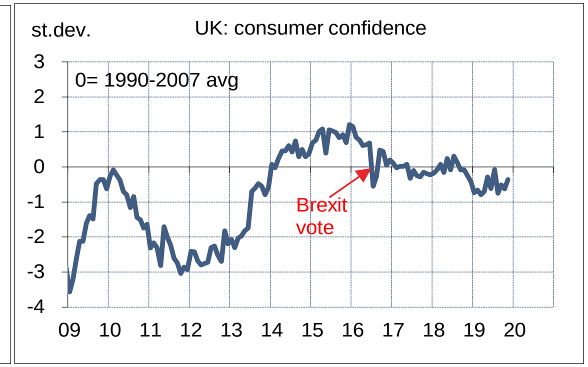
13/12/2019

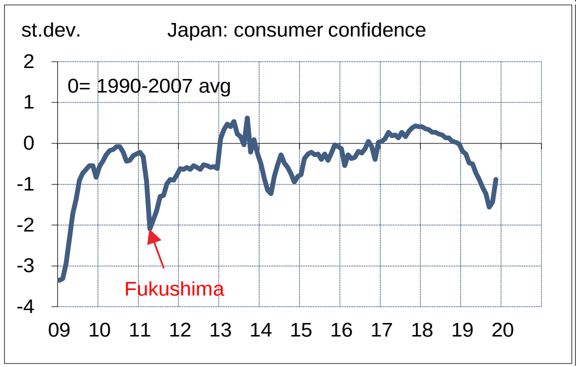
Source: Thomson Reuters, ODDO BHF

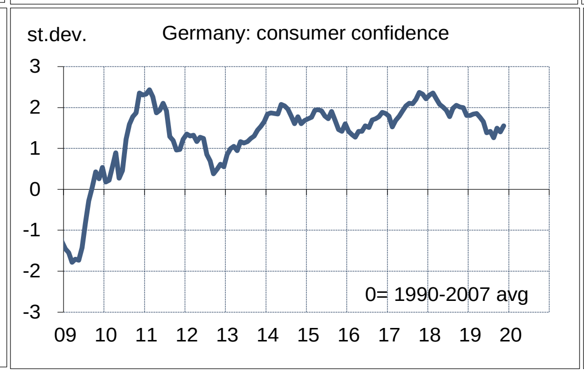
Appendix 11
Consumer confidence: developed countries (selection)

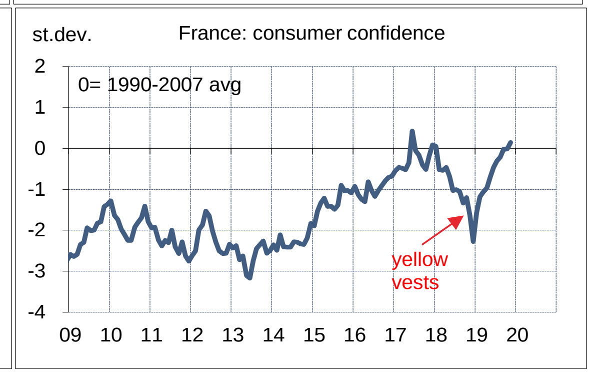


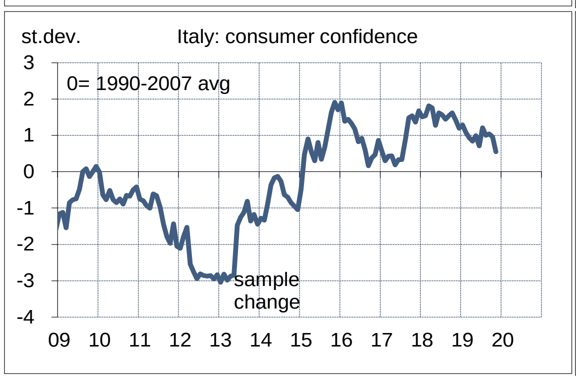


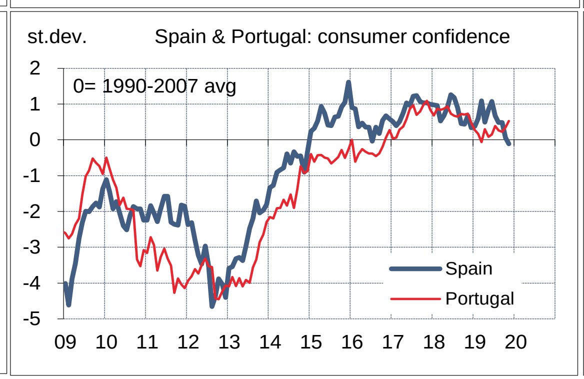


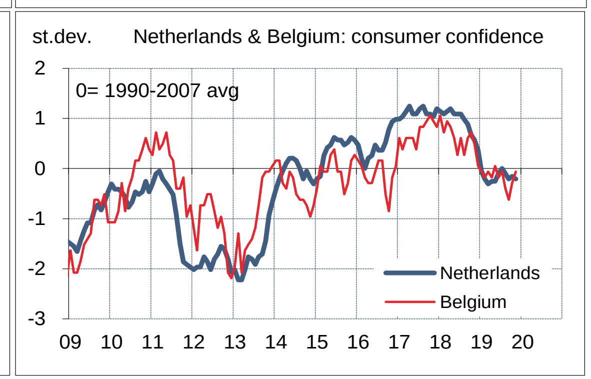








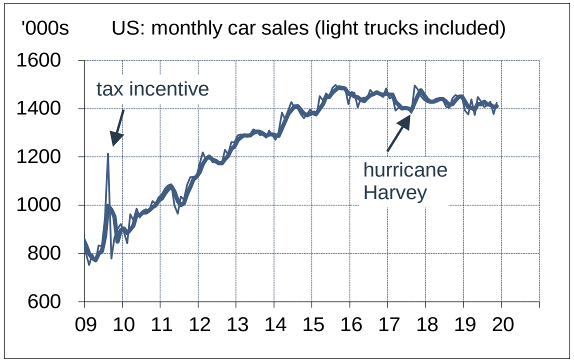


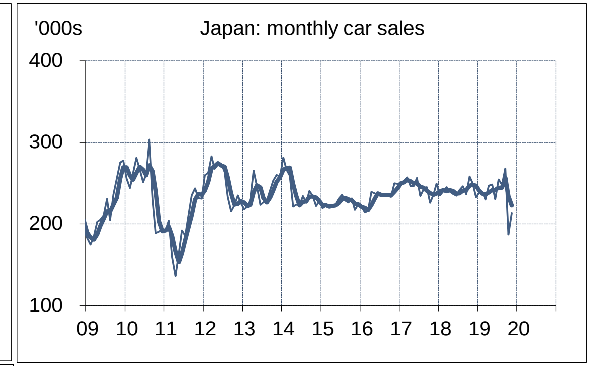


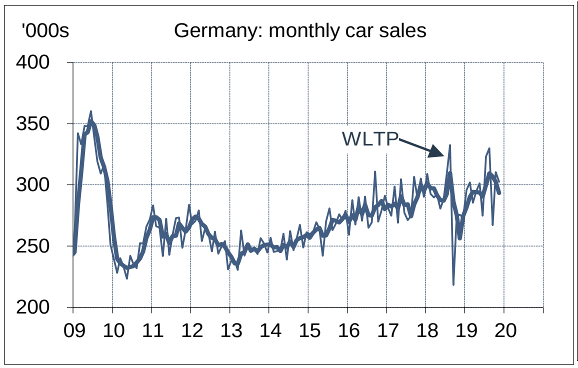
13/12/2019

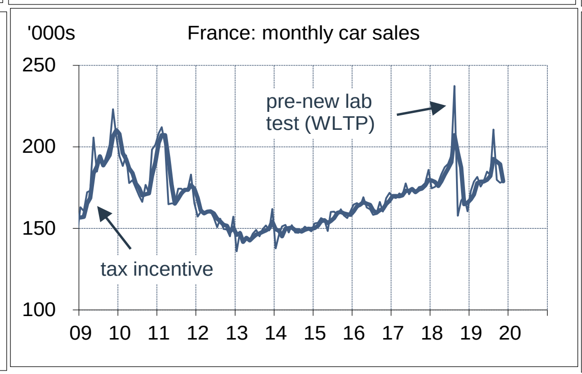
Source: Thomson Reuters, ODDO BHF

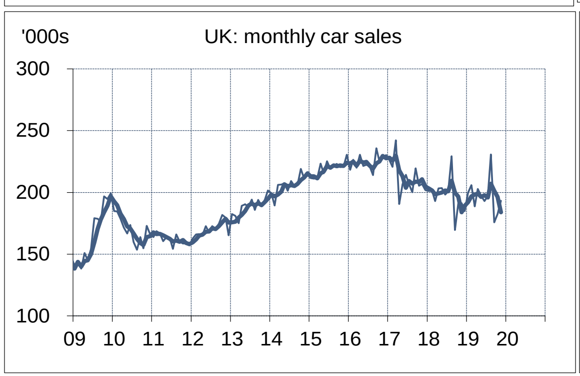
Appendix 12
Car sales: G7 countries + China + Brazil

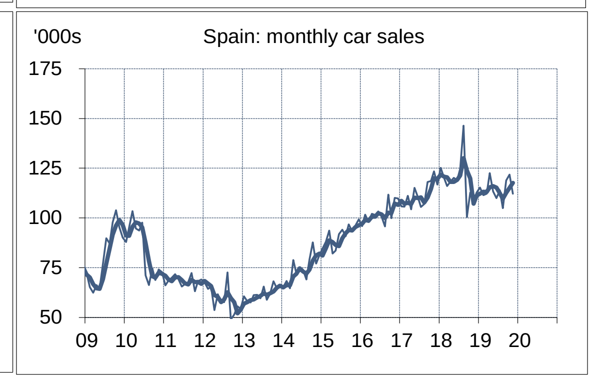








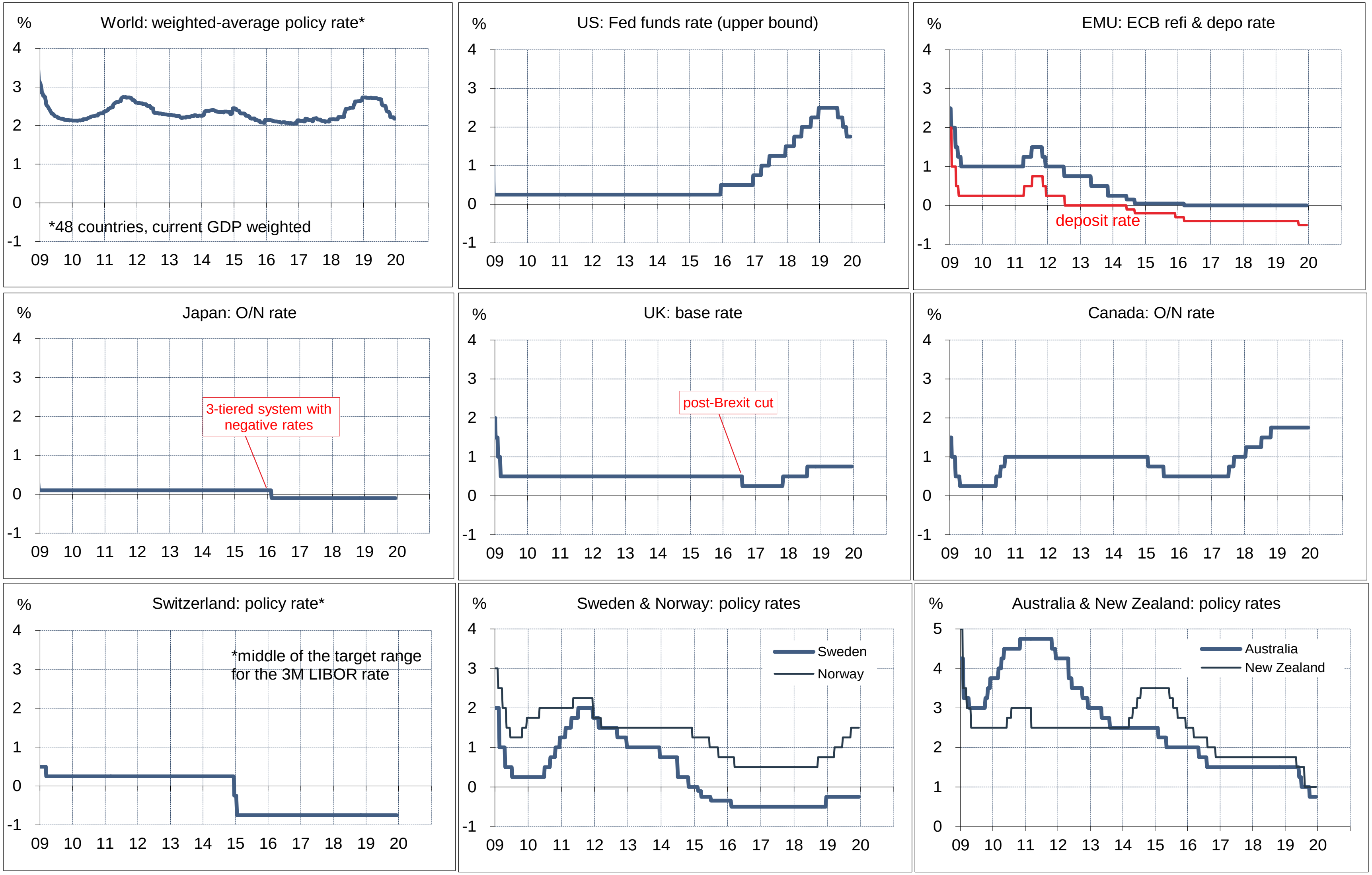




13/12/2019

Source: Thomson Reuters, ODDO BHF

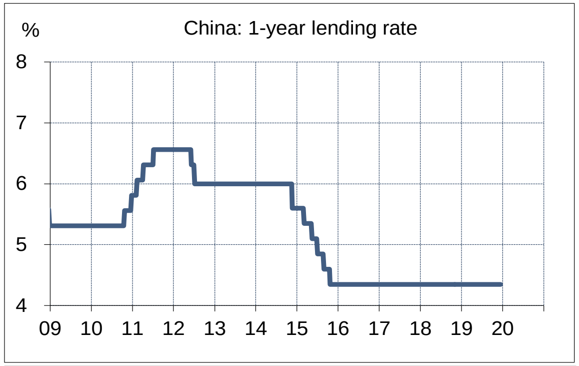
Appendix 13
Central bank policy rates: developed countries (selection)

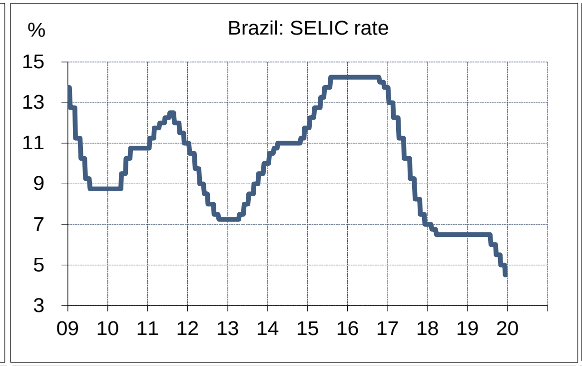


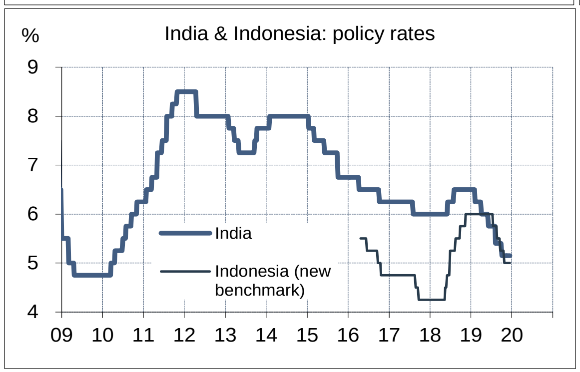
Source: Thomson Reuters, ODDO BHF

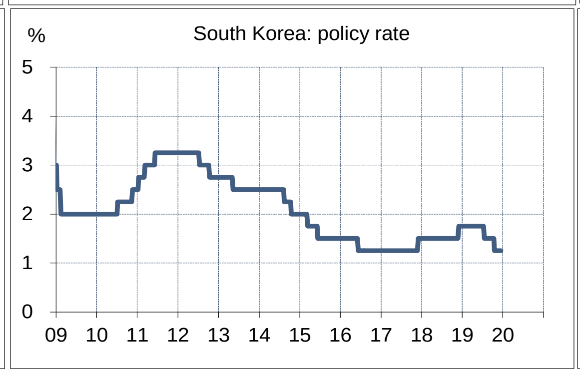
13/12/2019

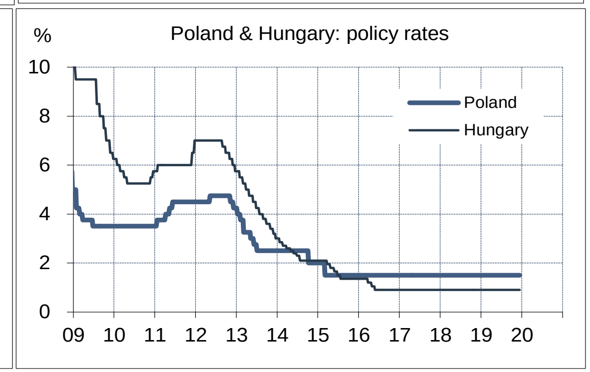
Appendix 14
Central bank policy rates: emerging countries (selection)

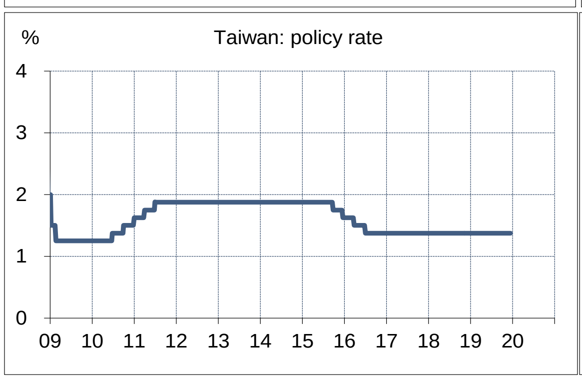


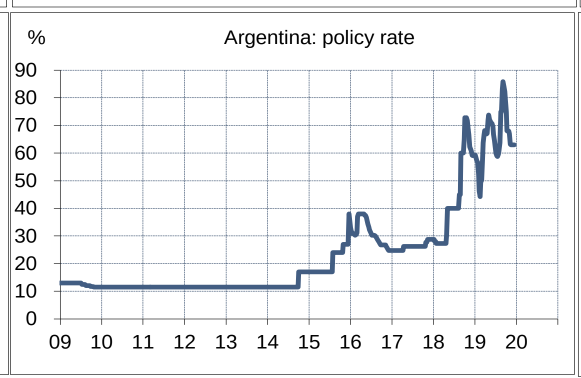








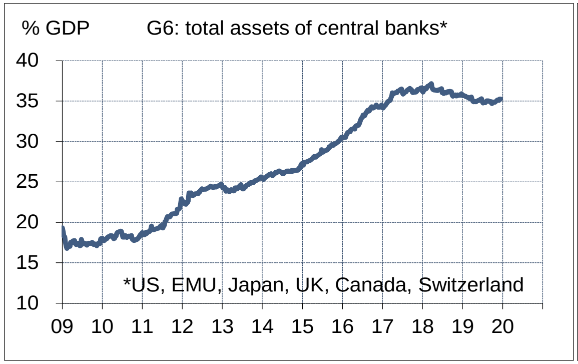


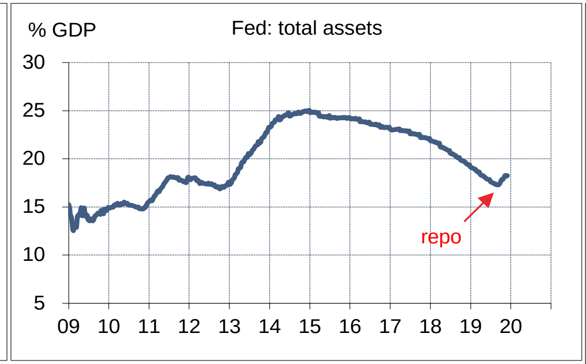


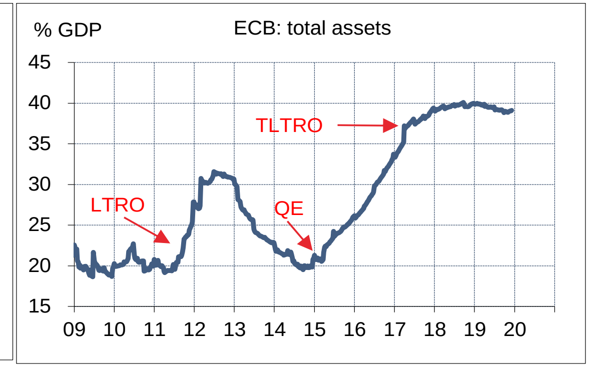
13/12/2019

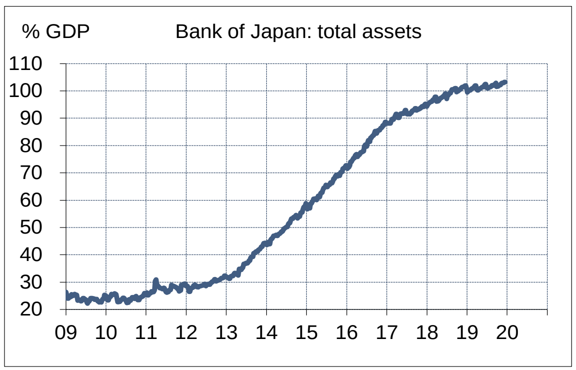
Source: Thomson Reuters, ODDO BHF

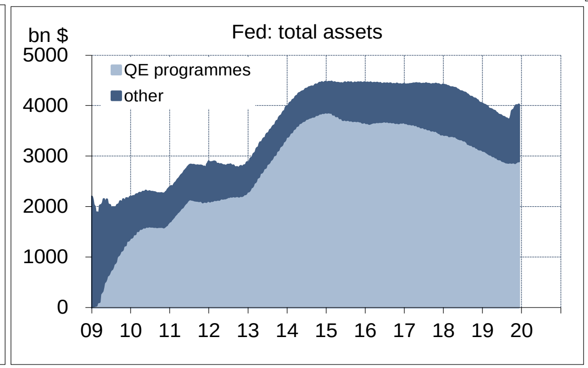
Appendix 15
Central bank balance sheets: developed countries (selection)

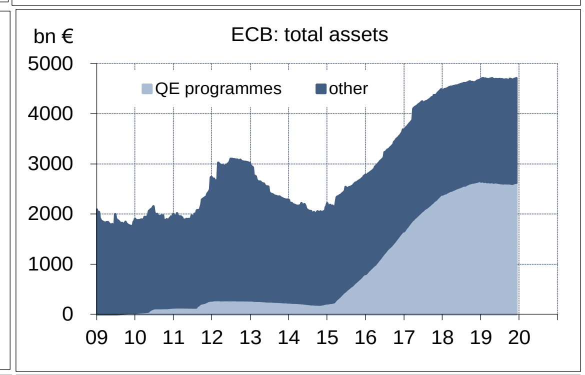


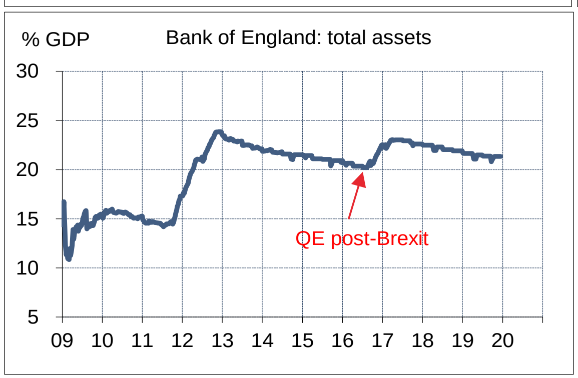


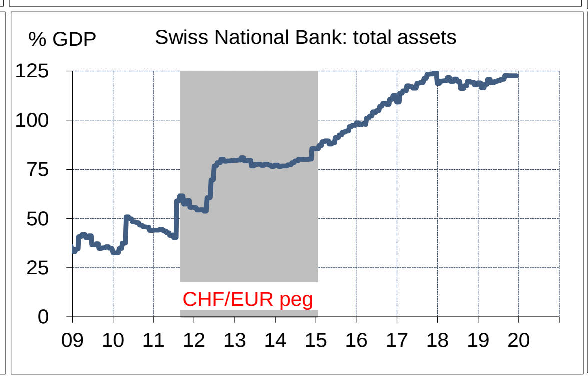


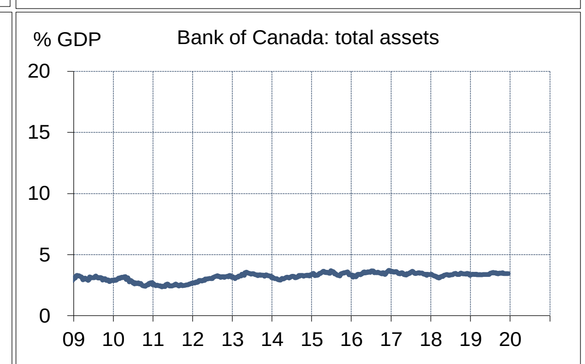












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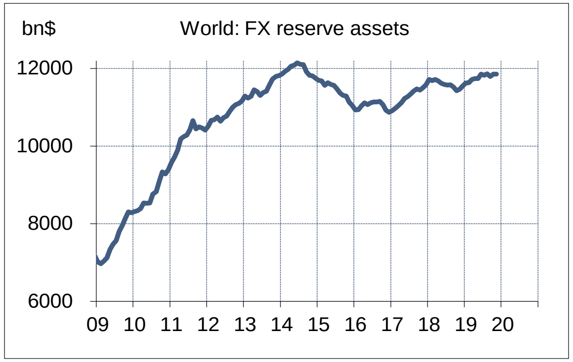
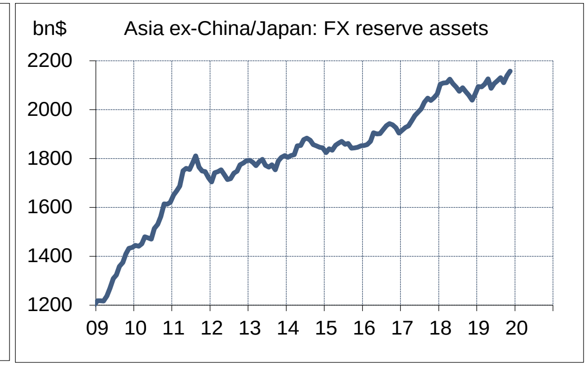
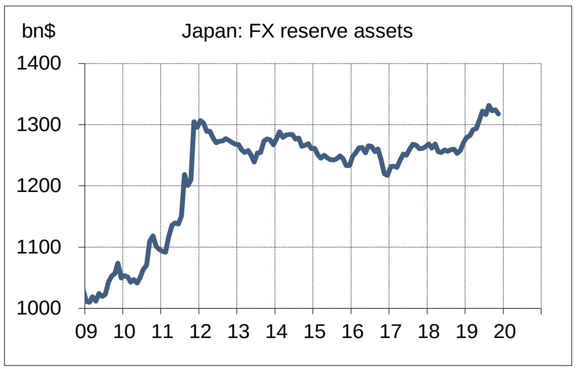
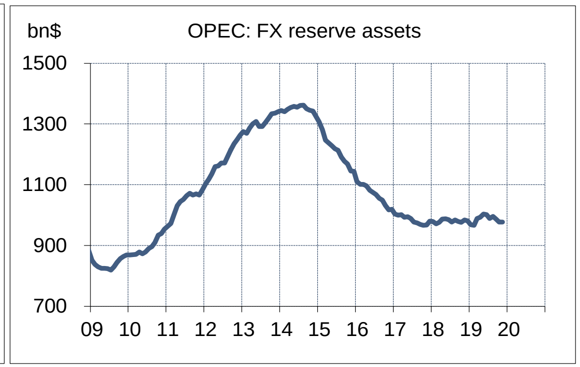
Source: Thomson Reuters, ODDO BHF

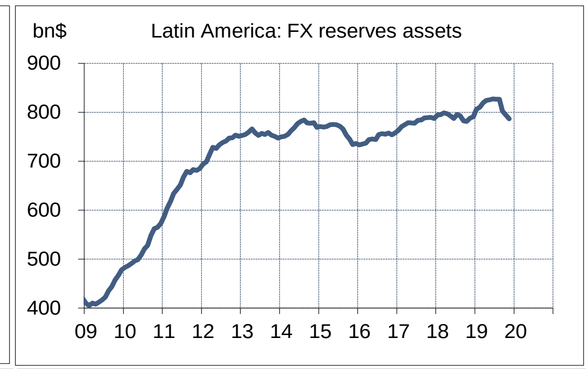
Appendix 16
Currency reserves (in US$): world and principal holders

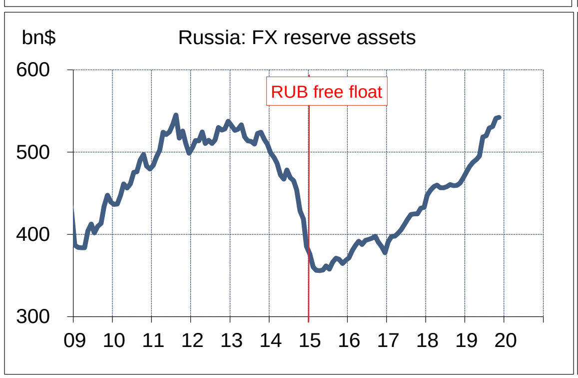


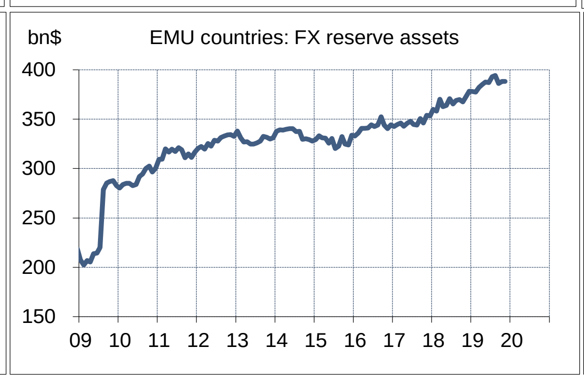


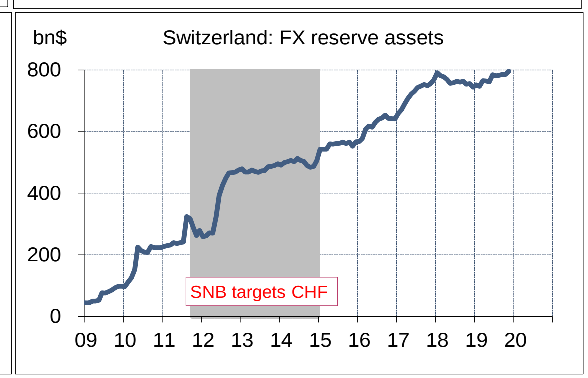












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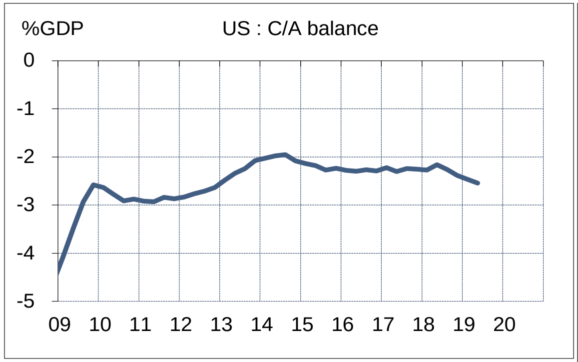
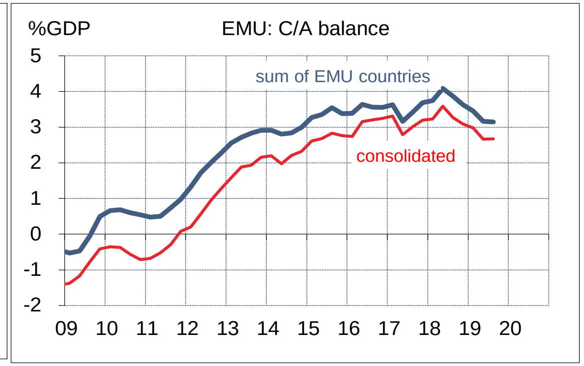
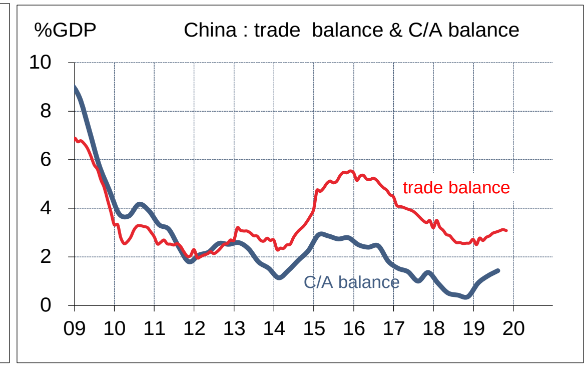
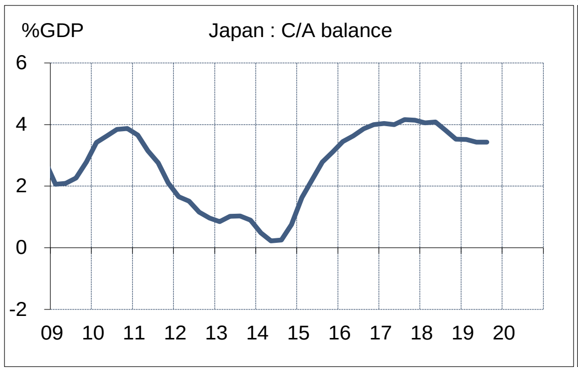
Source: Thomson Reuters, ODDO BHF

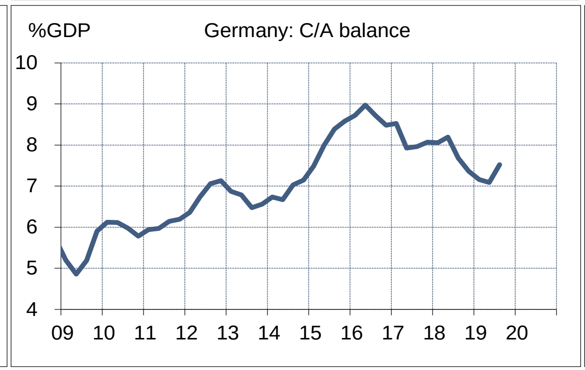
Appendix 17
Current account balances (% of GDP): G7 countries + China

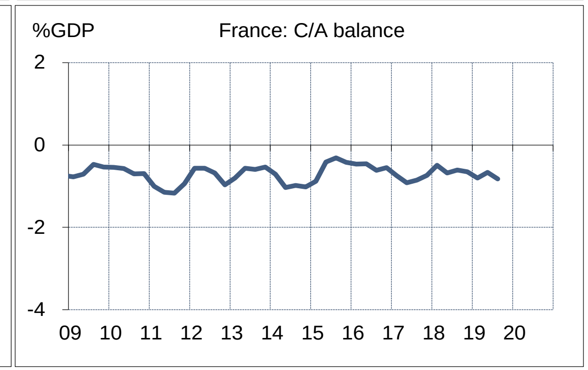


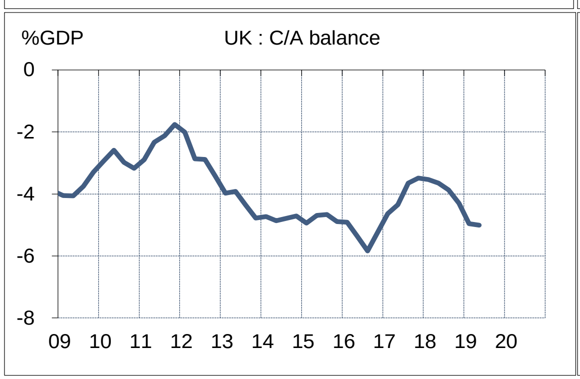


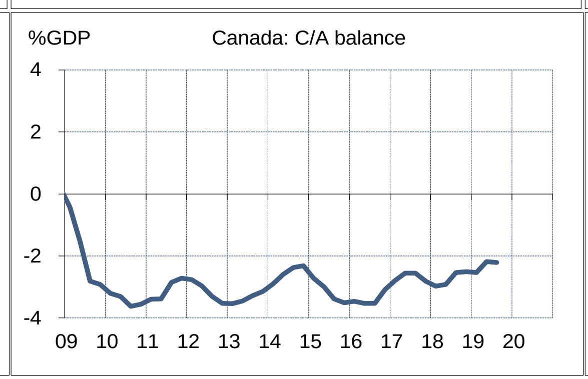


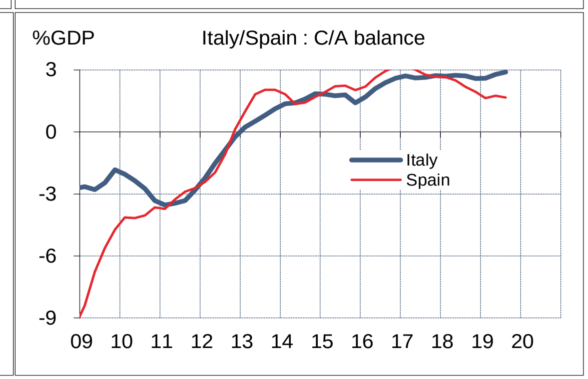












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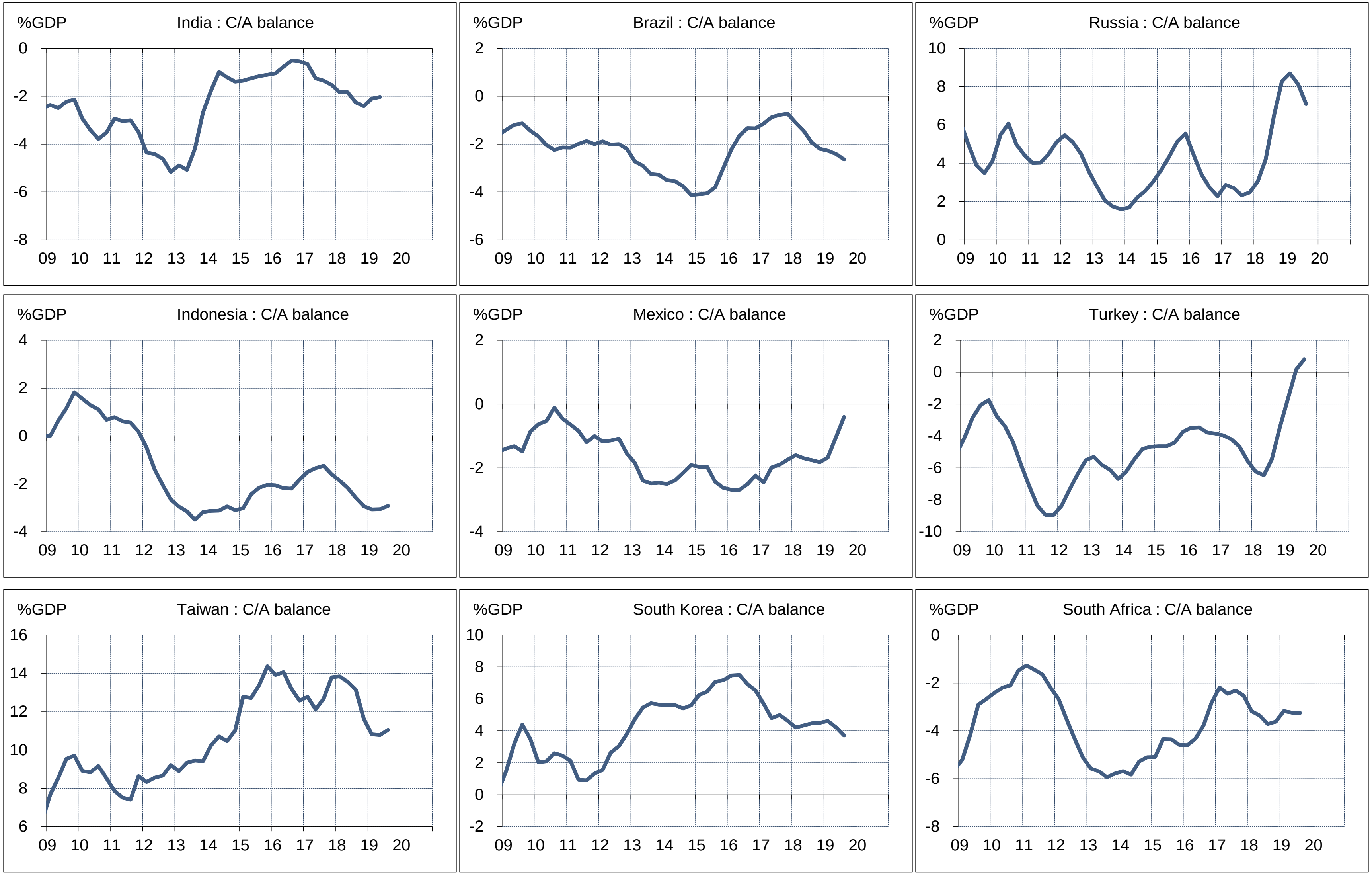
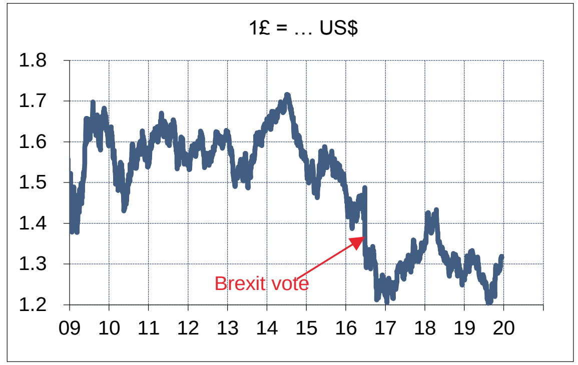
Source: Thomson Reuters, ODDO BHF

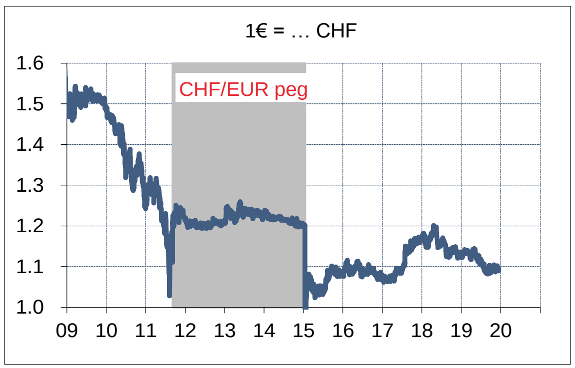
Appendix 18
Current account balances (% of GDP): emerging countries (selection)

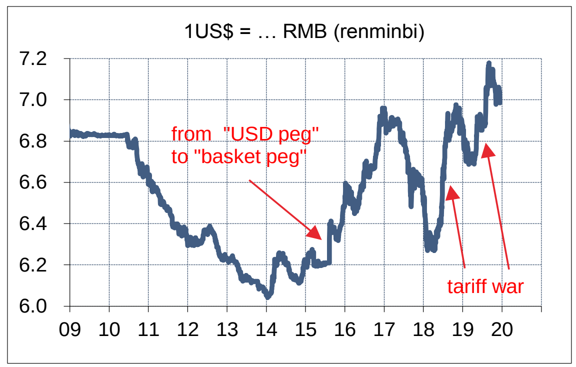


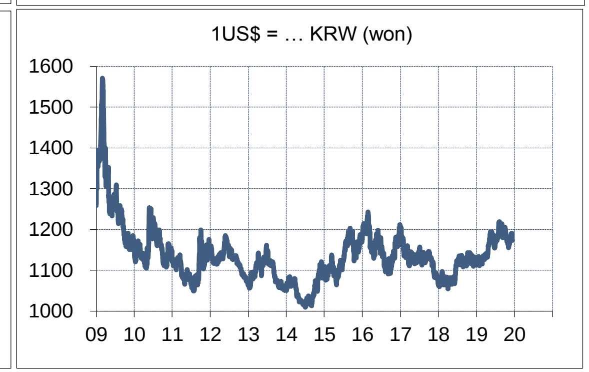
Source: Thomson Reuters, ODDO BHF

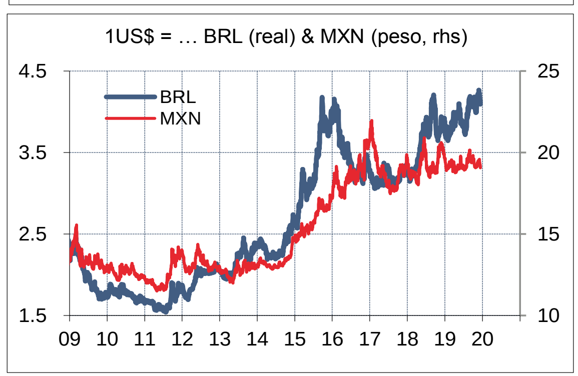
Appendix 19
Exchange rates vs EUR or US$: major currencies

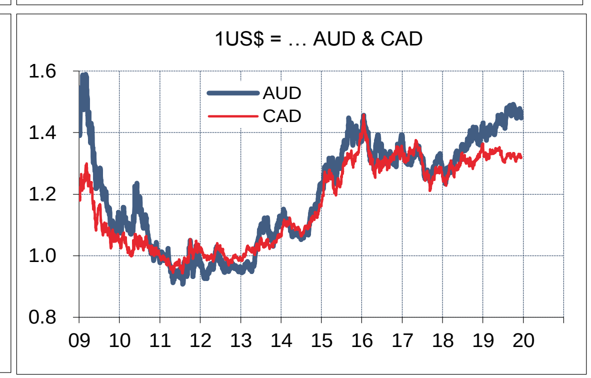












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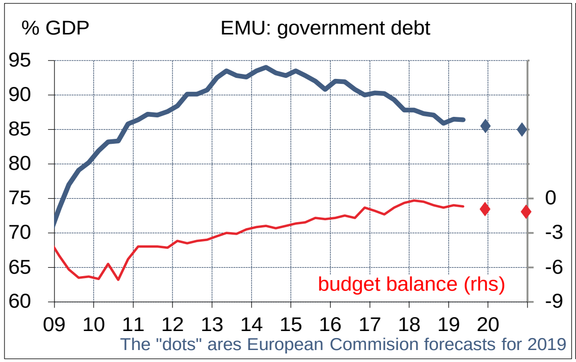
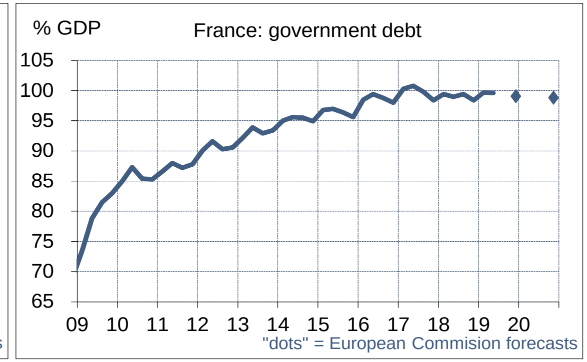
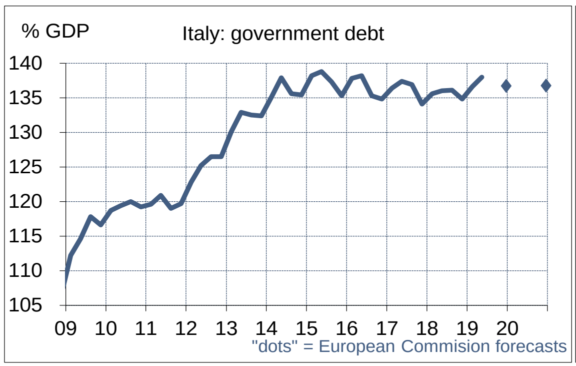
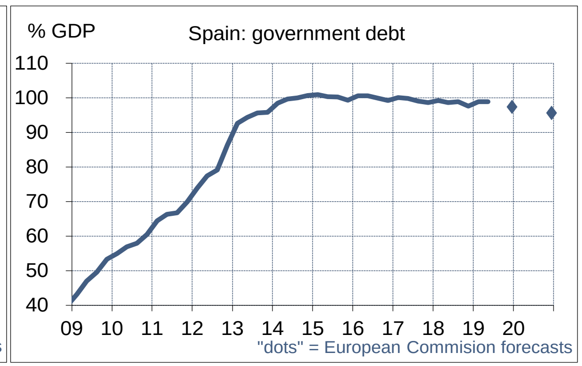
Source: Thomson Reuters, ODDO BHF

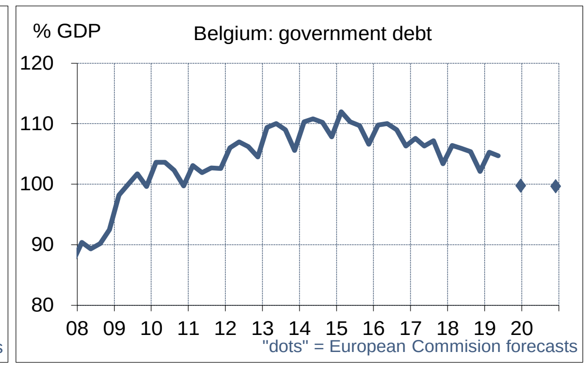
Appendix 20
Government debt (as a % of GDP): European countries (selection)

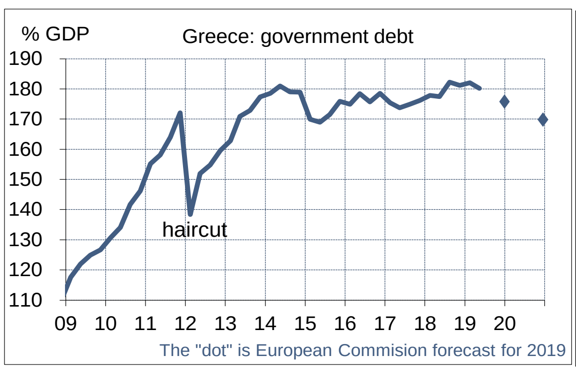


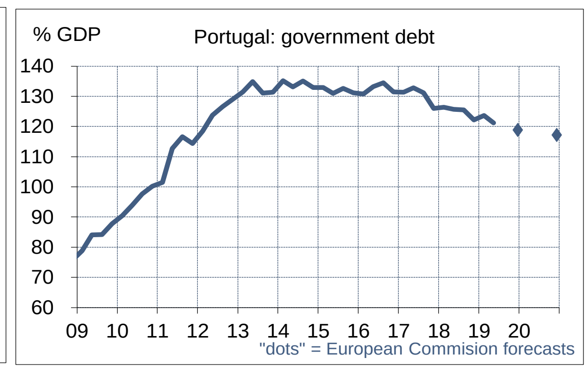












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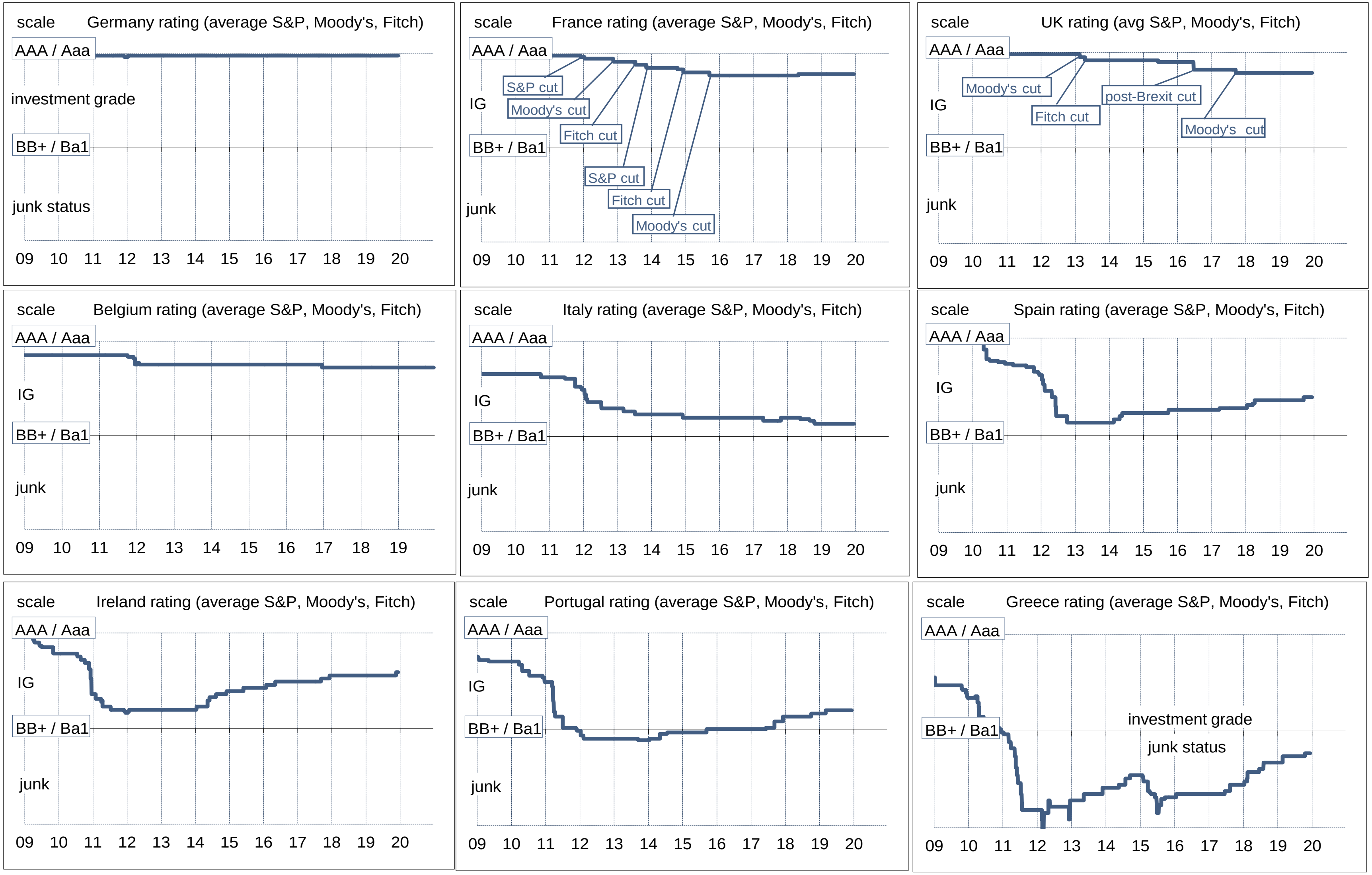
Source: Thomson Reuters, ODDO BHF

Appendix 21
Sovereign ratings: European countries (selection)



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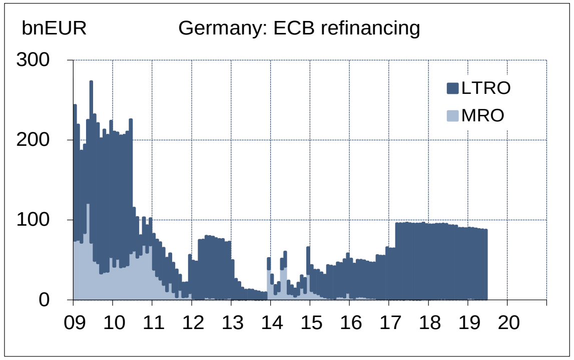
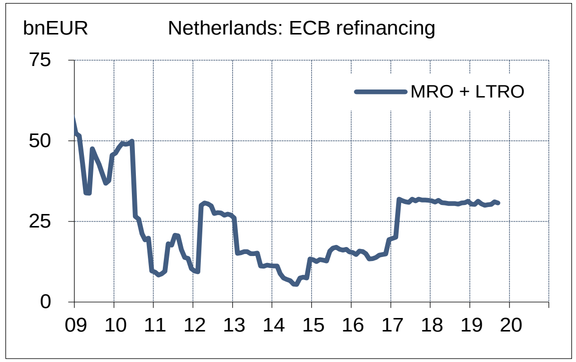
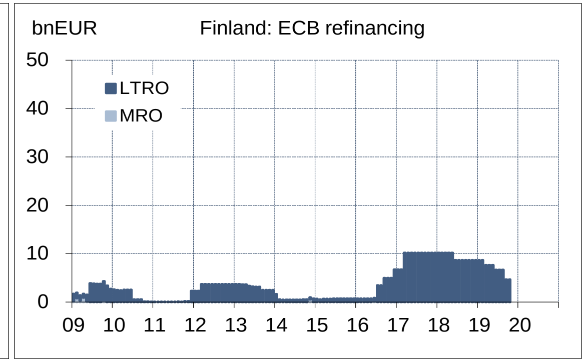
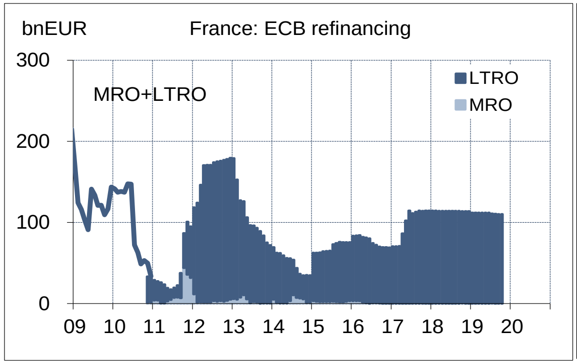
Source: Bloomberg, ODDO BHF

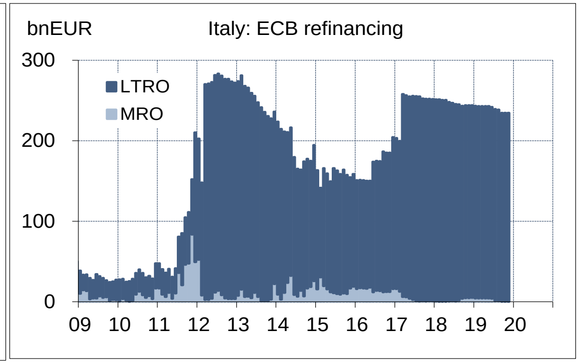
Appendix 22
Bank financing by the Eurosystem

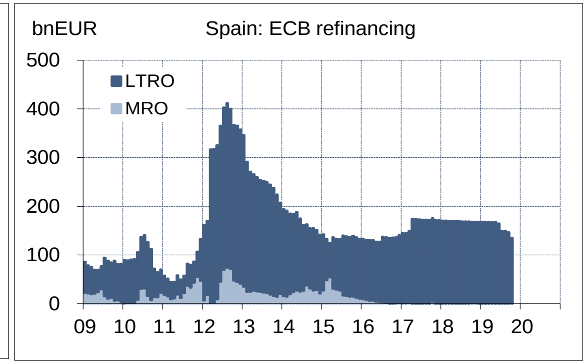


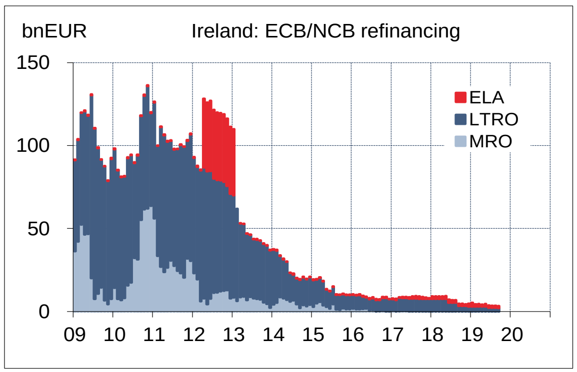


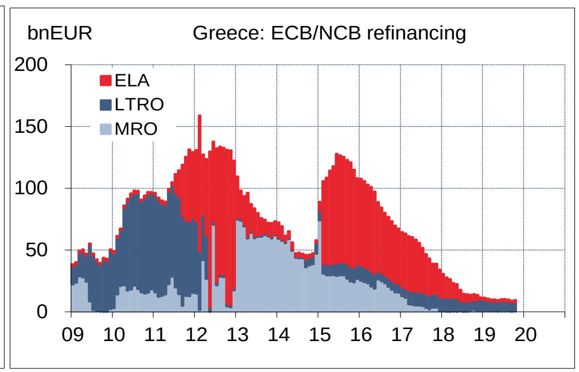


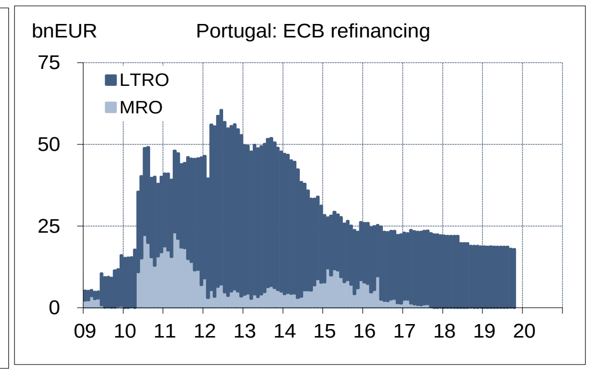












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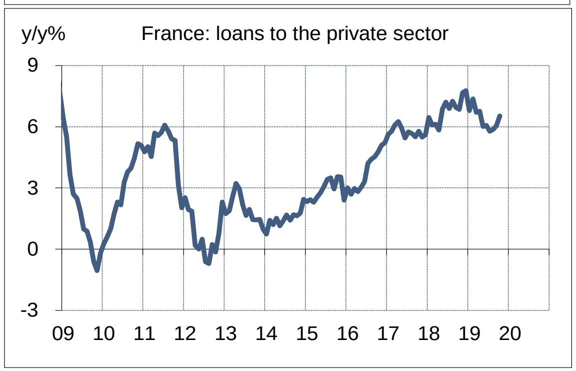
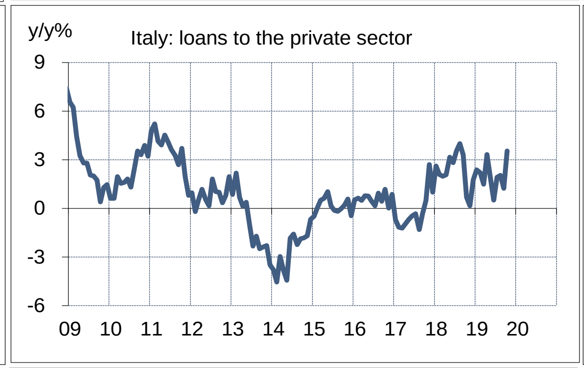
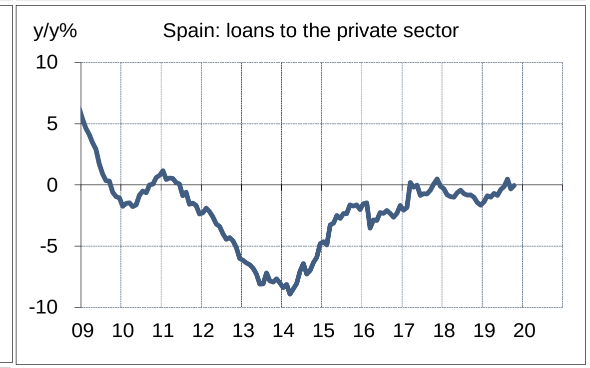
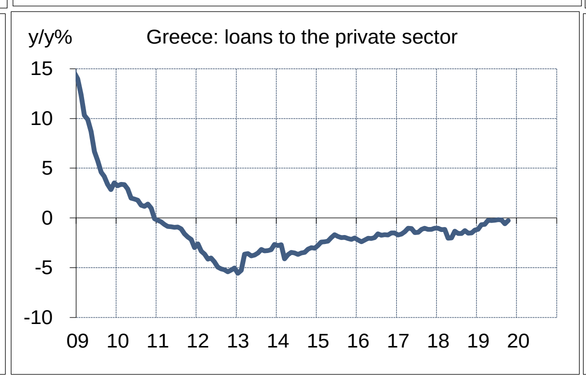
Source: Thomson Reuters, ODDO BHF

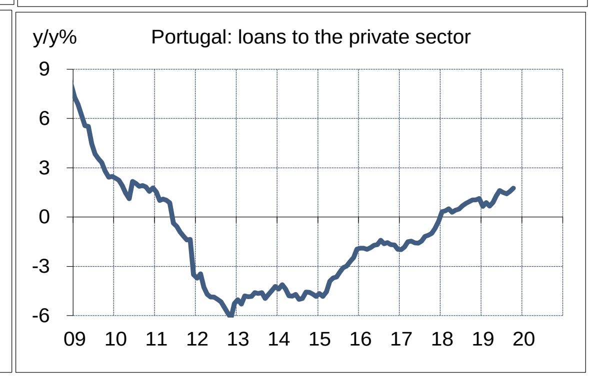
Appendix 23
Bank loans to the private sector: European countries (selection)





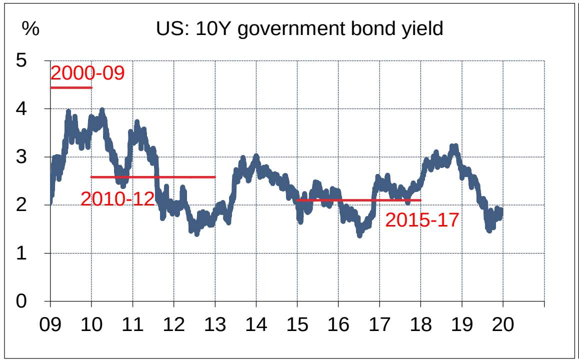


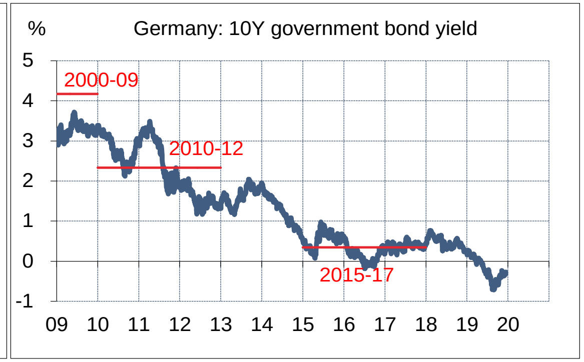


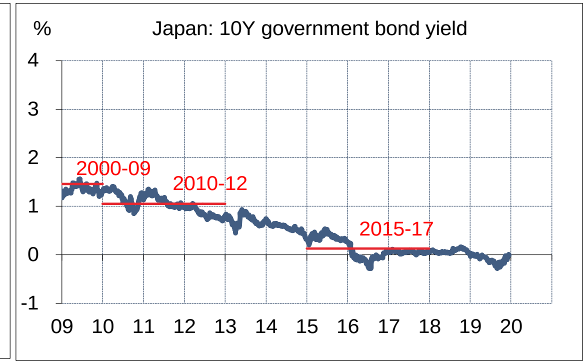


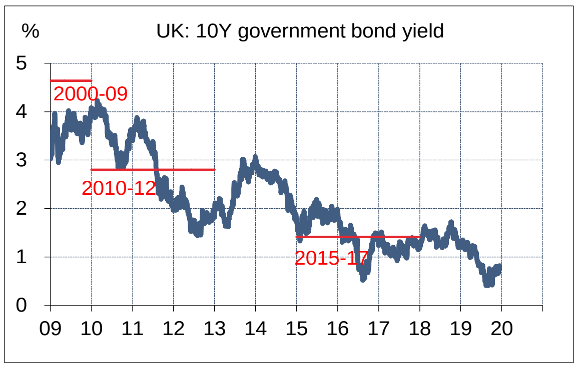
Source: Thomson Reuters, ODDO BHF

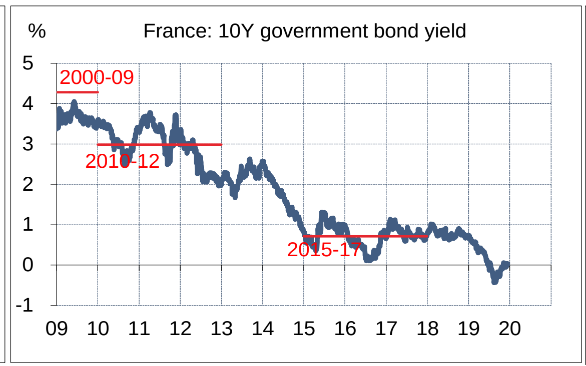
Appendix 24
10-year government bond yield

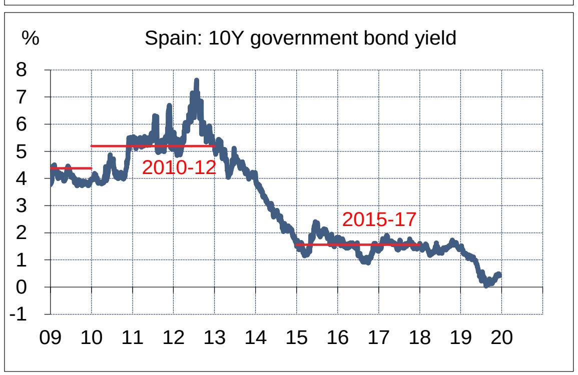


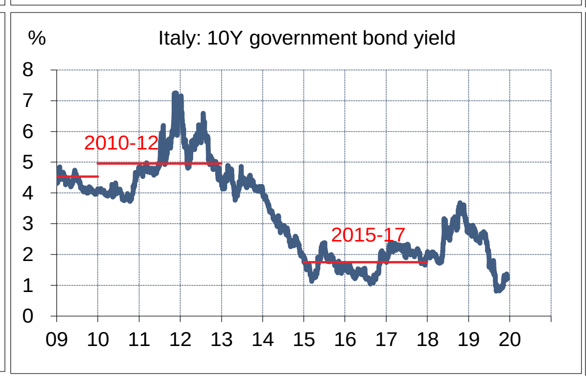


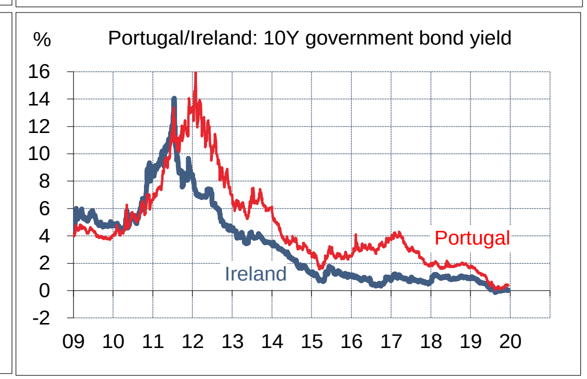












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Source: Bloomberg, ODDO BHF

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