ODDO BHF CORPORATES & MARKETS

Stagflation without stagnation?

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The economic concept most in vogue recently has been that of "stagflation", a term describing mounting unemployment (STAG-nation) and surging prices (in-FLATION). The reference case is that of advanced economies in the 1970s, a period of huge monetary turbulence and oil shocks. This situation creates a dilemma. Is it better to boost income and employment at the risk of stoking inflationary tensions, or to counter the overheating at the risk of plunging the economy into recession? The experience of the 1970s suggests that there is no middle way (fine tuning) and that the only effective cure is to tighten monetary policy sharply. Is this the problem faced today? Here is some background: activity and global trade have rebounded faster than anyone expected after the Great Lockdown. The divergence between the V-shaped profile of demand and the U-shaped profile of supply has been accentuated by low inventories. This is resulting today in widespread shortages that are driving up prices and, in some cases, wages. It is also leading to a drop in unemployment and an acceleration in capital expenditure to create additional supply capacities. In short, inflation is clearly present, but not stagnation. The pace of economic growth is set to slow in 2022, either because the recovery loses momentum (in the US and Europe) or in a bid to curb over-indebtedness (China). In contrast, there is no clear evidence to claim that inflation rates will continue rising.

Tables of forecasts

Table of forecasts (1)

FORECASTS - REAL GDP GROWTH*

	Average			2020				2021				**Consensus****		**IMF**		**OECD**	
	2020	2021	2022	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2021	2022	2021	2022
World	-3.3	*5.9*	*4.5*											5.9	4.9	5.7	4.5
US	-3.4	*5.4*	*4.2*	-5.1	-31	34	4.5	6.3	6.7	*2.0*	*4.0*	5.7	4.1	6.0	5.2	6.0	3.9
EMU	-6.5	*5.4*	*5.3*	-13	-39	61	-1.5	-1.2	8.7	*11*	*5.4*	5.1	4.4	5.0	4.3	5.3	4.6
- Germany	-4.9	*2.7*	*5.5*	-6.9	-34	41	3.0	-7.8	6.7	*8.1*	*5.9*	2.8	4.4	3.1	4.6	2.9	4.6
- France	-8.0	*6.4*	*4.5*	-21	-44	98	-4.3	0.2	4.5	*10*	*4.7*	6.1	3.8	6.3	3.9	6.3	4.0
- Italy	-9.0	*6.3*	*5.0*	-21	-43	80	-6.8	0.9	11	*10*	*4.6*	5.9	4.3	5.8	4.2	5.9	4.1
- Spain	-10.8	*5.5*	*6.7*	-20	-54	86	0.9	-2.5	4.3	*17*	*7.4*	5.6	6.1	5.7	6.4	6.8	6.6
UK	-9.7	*6.9*	*4.1*	-10	-58	90	4.5	-5.3	24	*6.1*	*2.8*	6.9	5.1	6.8	5.0	6.7	5.2
Japan	-4.7	*2.5*	*2.7*	-2.3	-28	23	12	-4.2	1.9	*2.0*	*6.1*	2.3	3.0	2.4	3.2	2.5	2.1
China (y/y%)	2.3	*8.0*	*5.0*	-6.8	3.2	4.9	6.5	18	7.9	*4.9*	*3.8*	8.2	5.5	8.0	5.6	8.5	5.8

* y/y or q/q annualised rate, except for China (y/y% only)　　**11 October 2021　12 October 2021　21 Sept.2021

FORECASTS - RATES & FX

	Actual	Target		Last 5 years*		Average					
	20/10/2021	3M	12M	High	Low	2017	2018	2019	2020	*2021*	*2022*
Policy rate											
Fed funds	0.25	0.25	0.25	2.50	0.25	1.13	1.96	2.25	0.50	*0.25*	*0.25*
ECB deposit rate	-0.50	-0.50	-0.50	-0.40	-0.50	-0.40	-0.40	-0.43	-0.50	*-0.50*	*-0.50*
10Y rate											
US T-note	1.7	1.7	2.0	3.2	0.6	2.3	2.9	2.1	0.9	*1.5*	*1.9*
German Bund	-0.1	-0.1	0.0	0.7	-0.6	0.4	0.5	-0.2	-0.5	*-0.3*	*-0.1*
French OAT	0.2	0.2	0.3	1.0	-0.4	0.8	0.7	0.1	-0.2	*0.0*	*0.2*
Forex											
EUR/USD	1.16	-	1.20	1.23	1.05	1.13	1.18	1.12	1.14	*1.19*	*1.19*
USD/JPY	114	-	109	116	104	112	110	109	107	*110*	*110*
USD/RMB	6.39	-	6.50	7.12	6.30	6.76	6.61	6.91	6.90	*6.46*	*6.47*

*monthly average

Sources : Consensus forecasts, MF, OECD, ODDO BHF Securities

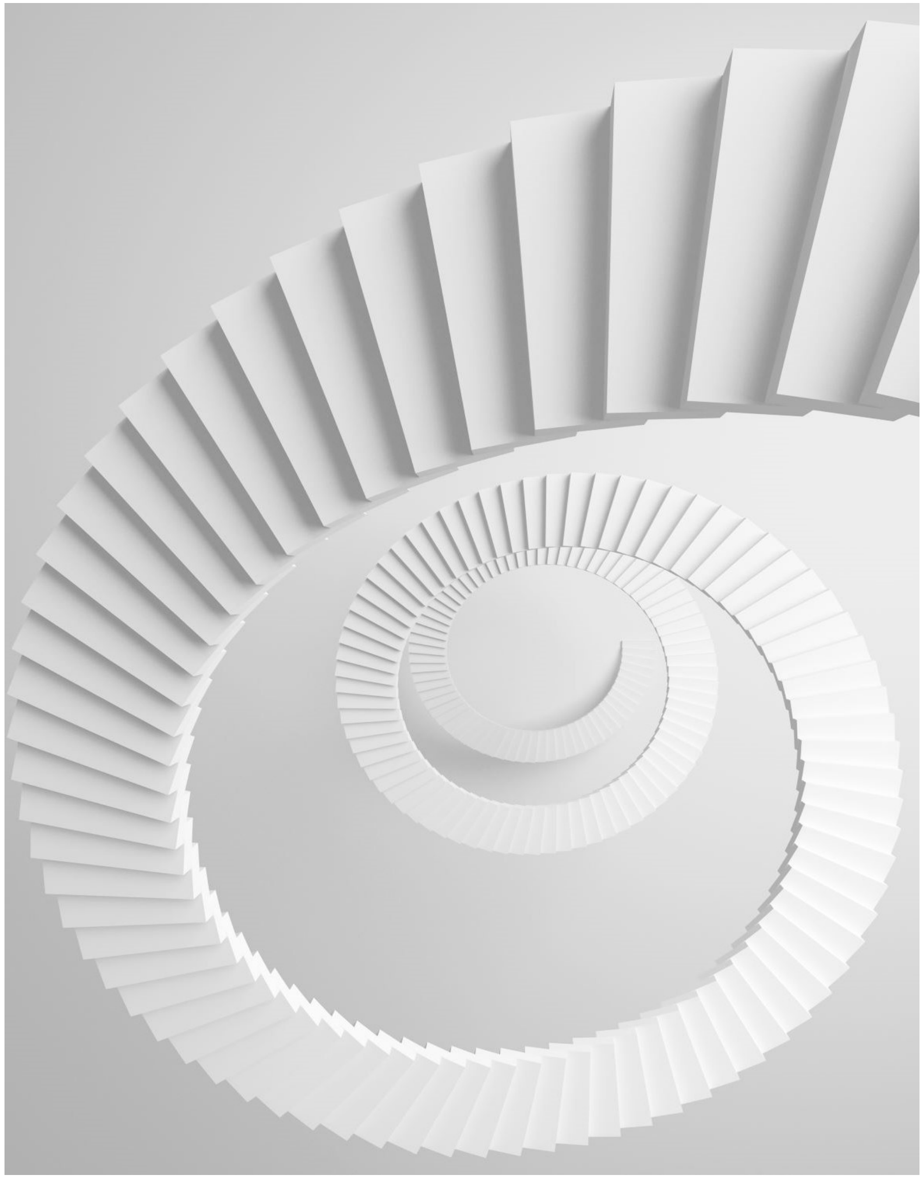
Table of forecasts (2)

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

	Average			2020				2021			
	2020	2021	2022	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
United States											
Real GDP	-3.4	*5.4*	*4.2*	-5.1	-31	34	4.5	6.3	6.7	*2.0*	*4.0*
Private Consumption	-3.8	*7.8*	*4.1*	-6.9	-33	41	3.4	11	12	*0.8*	*4.0*
Nonresidential Investment	-5.3	*7.0*	*5.4*	-8.1	-30	19	13	13	9.2	*-2.0*	*4.0*
Residential Investment	6.8	*10*	*0.1*	20	-31	60	34	13	-12	*-3.0*	*0.0*
Domestic Demand (contribution, %pt)	-2.8	*7.0*	*4.3*	-4.8	-28	32	5.1	11	8.8	*1.0*	*4.3*
Inventories (contribution, %pt)	-0.6	*-0.4*	*0.1*	-1.0	-4.6	6.6	1.4	-3.7	-1.7	*1.4*	*0.0*
Net Exports (contribution, %pt)	-0.2	*-1.7*	*-0.2*	0.1	1.4	-5.6	-2.4	-2.0	-0.4	*-0.4*	*-0.3*
Inflation (CPI, % yoy)	1.2	*4.4*	*3.2*	2.1	0.4	1.3	1.2	1.9	4.8	*5.3*	*5.5*
Unemployment rate (%)	8.1	*5.5*	*4.1*	3.8	13.1	8.8	6.8	6.2	5.9	*5.1*	*4.7*
Euro area											
Real GDP	-6.5	*5.4*	*5.3*	-13	-39	61	-1.5	-1.2	8.7	*11*	*5.4*
Private Consumption	-8.0	*3.5*	*6.4*	-16	-42	72	-12	-8.8	15	*18*	*5.4*
Investment	-7.3	*4.9*	*5.2*	-16	-58	68	11	-0.2	4.5	*8.1*	*5.4*
Domestic Demand (contribution, %pt)	-5.3	*3.5*	*4.6*	-12	-38	53	-3.5	-4.8	8.9	*10*	*4.2*
Inventories (contribution, %pt)	-0.6	*0.4*	*0.3*	0.8	-0.5	-6.4	2.6	*3.1*	-0.9	*0.1*	*0.6*
Net Exports (contribution, %pt)	-0.3	*1.2*	*0.4*	-1.5	2.0	9.4	-0.3	*0.3*	0.1	*0.0*	*0.6*
Inflation (HICP, % yoy)	0.3	*2.4*	*2.1*	1.1	0.2	0.0	-0.3	1.1	1.8	*2.8*	*3.7*
Unemployment rate (%)	7.9	*7.8*	*7.3*	7.3	7.6	8.5	8.2	8.1	8.0	*7.5*	*7.5*
France											
Real GDP	-8.0	*6.4*	*4.5*	-21	-44	98	-4.3	0.2	4.5	*10*	*4.7*
Private Consumption	-7.2	*3.8*	*4.8*	-21	-39	95	-20	0.1	4.1	*15*	*4.0*
Investment	-8.9	*13*	*4.6*	-33	-50	154	10	1.5	9.7	*6.0*	*4.0*
Domestic Demand (contribution, %pt)	-6.8	*6.4*	*4.2*	-22	-42	111	-10	0.1	5.2	*10*	*3.6*
Inventories (contribution, %pt)	-0.2	*0.2*	*0.0*	1.4	3.4	-8.7	2.6	1.6	0.4	*-0.3*	*0.0*
Net Exports (contribution, %pt)	-1.1	*0.0*	*0.3*	-0.3	-6.5	2.1	3.3	-1.7	-1.1	*0.8*	*1.1*
Inflation (HICP, % yoy)	0.5	*2.0*	*1.9*	1.3	0.3	0.4	0.1	1.0	1.8	*2.2*	*3.2*
Unemployment rate (%)	7.9	*7.7*	*7.5*	7.6	7.1	8.9	7.8	7.8	7.8	*7.6*	*7.6*

* y/y or q/q annualised rate

Sources: Thomson Reuters, ODDO BHF Securities



Stagflation: a guide

What will be the post-pandemic economic regime?

Global shocks	Type of shock	Medium-term impact on… ...growth	...inflation	(combined)
Oil shocks (1970s) *(+FX volatility)*	**Supply**	negative	positive	⇒ stagflation
Great Financial Crisis (2008) *(+ euro crisis)*	**Demand**	negative	negative	⇒ secular stagnation
Pandemic (2020)	**Supply & Demand**	undecided (positive?)	undecided (positive?)	-

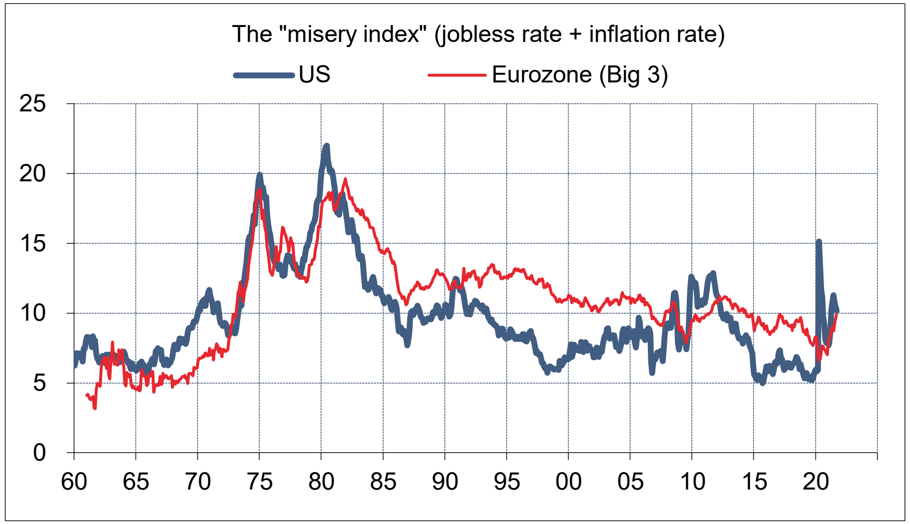
G7 countries (weighted average)	Real GDP growth % p.a	CPI inflation % p.a
1960s	5.3	3.3
Oil shocks		
1975-1979	3.4	8.8
Post-shock change =	*-2.0*	*5.6*
2000s	2.4	1.9
Great Financial Crisis		
2010-2015	1.4	1.4
Post-shock change =	*-1.0*	*-0.5*

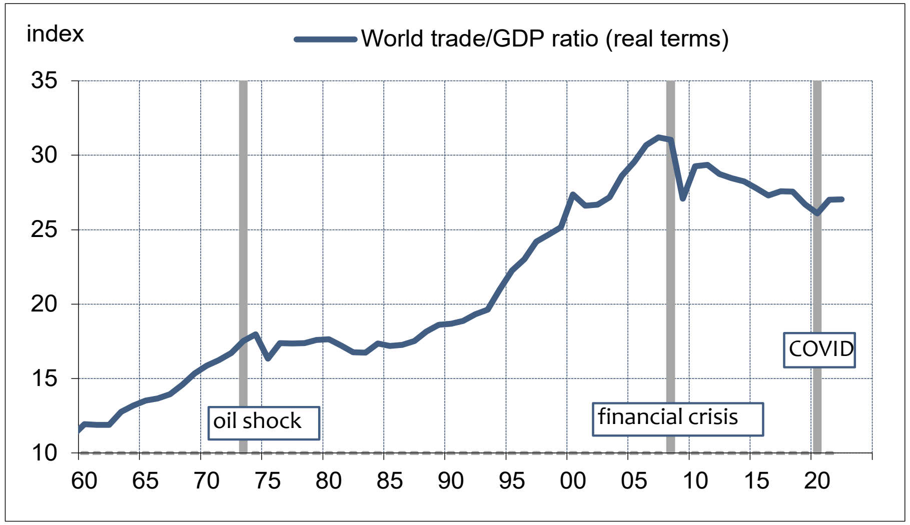
Sources: ODDO BHF Securities

Short-term fluctuations provide only very imperfect information about the lasting consequences of the shock

- A negative supply-side shock depresses production and raises prices – The canonical example: oil shocks in the 1970s (Kippur 1973, Iran 1979). The growth trend in developed countries was almost halved and the inflation rate was almost tripled.
- A negative demand shock depresses incomes, trade and prices – The canonical example: the financial crisis resulting from the bursting of the subprime loans bubble and its numerous sequels (clean-up of balance sheets and the euro crisis). The economic recovery was slow, faltering and jobless, tipping the economy into deflationary territory.
- The coronavirus pandemic (2020) is neither one nor the other, but an unprecedented combination of both shocks. It initially combined a negative supply and demand shock, followed by an asymmetrical correction (V-shaped demand recovery and U-shaped production recovery). Its medium-term implications are still being debated. The strength of the current inflation spike is surprising, but there is no evidence that it has eliminated pre-existing deflationary forces (demographics, competition and deleveraging). The pandemic crisis has also accelerated or driven capital expenditure, potentially generating new productivity gains in the future and, ultimately, higher growth potential.

Economic misery and world trade: a long-term perspective



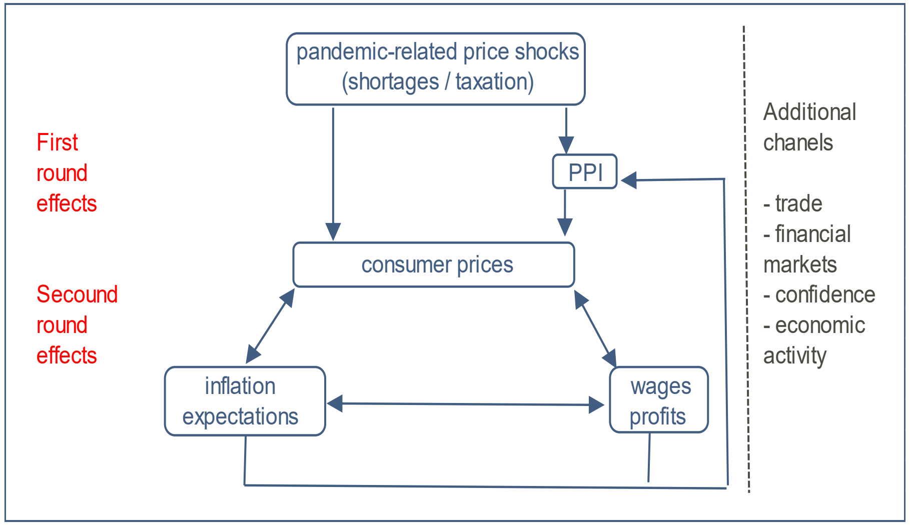


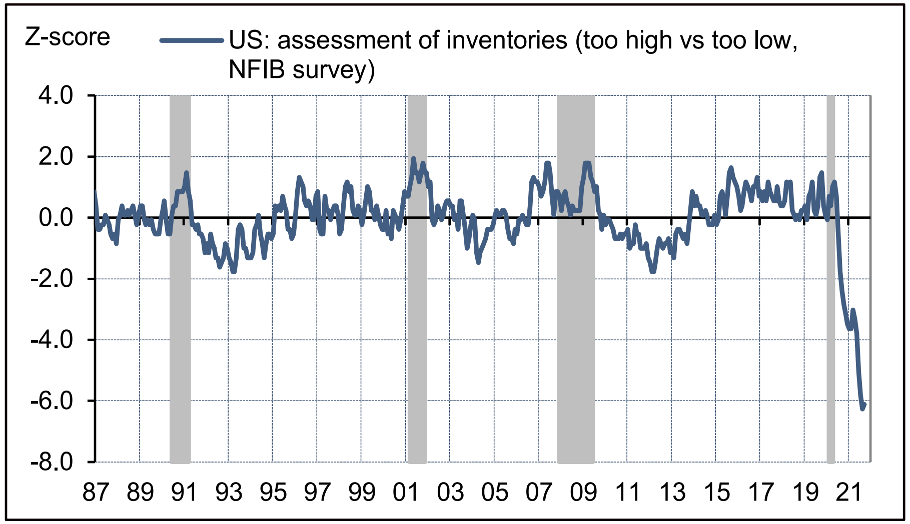
Sources: Thomson Reuters, ODDO BHF Securities

Major differences between the three global shocks

- Oil shocks (1970): lasting rise in "misery indices" (unemployment + inflation) / lasting pause in the growing integration of world trade.
- Financial crisis (2008): lasting rise in unemployment / deflation risk / attacks on free trade and growing protectionist tendencies (US-China tariff war, Brexit)
- Pandemic (2020): swift roll-out of mechanisms to prevent or mitigate unemployment / sharp acceleration in inflation in response to the supply-demand imbalance (shortages) / very swift recovery in world trade and growing trade volumes despite supply chain disruptions.

Inflation mechanism: exogenous shock vs self-perpetuating increase



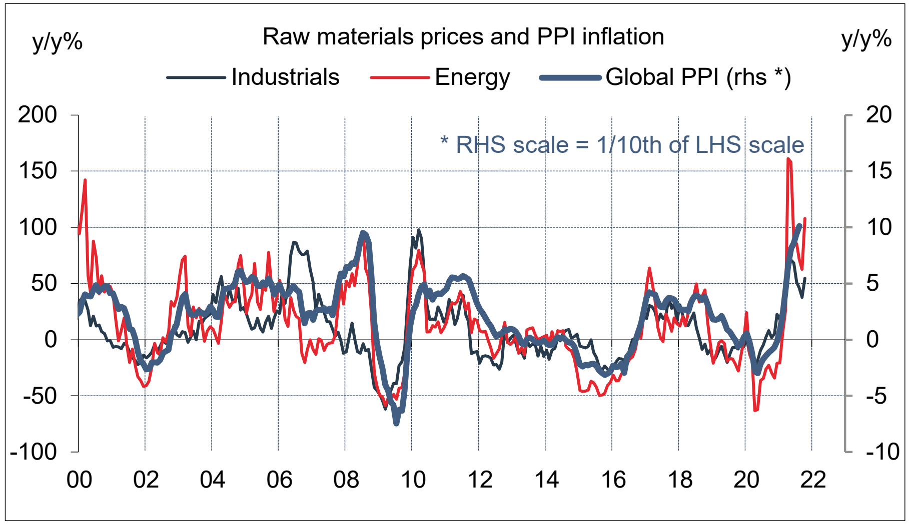


Sources: Thomson Reuters, ODDO BHF Securities

The supply-demand imbalance is compounded by the weakness of inventories and the fragmentation of supply chains (*just-in-time*)

- The retail price formation chain is complex. Upstream pressures on prices of basic products or production prices may be partially absorbed downstream, either through competition or through the intervention of public authorities (example: reaction to the surge in wholesale energy prices). Some shocks feeds through rapidly (oil) and others slowly (wages).
- Shortages of intrants and hiring difficulties attest to the success of stabilisation measures taken at the start of the pandemic crisis. In a normal crisis, by contrast, businesses would be hesitant right at the start of the recovery to produce and recruit because of uncertainties about future demand and balance-sheet clean-up efforts (excess inventories and overleveraging).
- Faced with shortages, economic agents have a tendency to overstock (“*if you panic, panic first*"), prolonging and amplifying market imbalances, etc. (classic illustration of a coordination problem with imperfect information).

Inflation: first-round effects

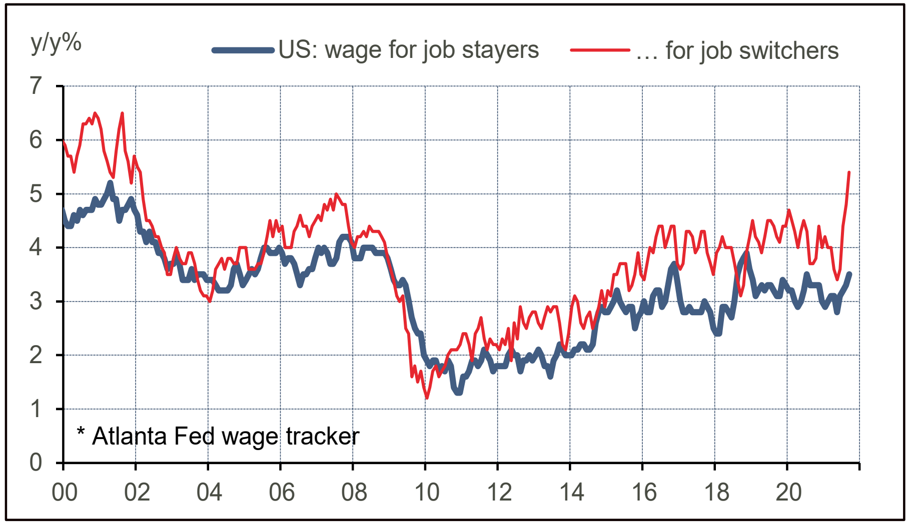


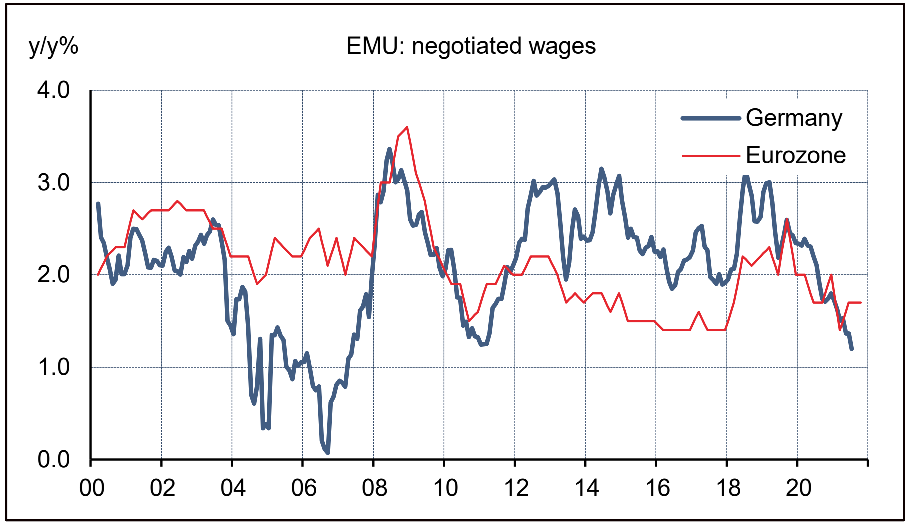
Sources: Thomson Reuters, Bloomberg, ODDO BHF Securities

There are shortages at all stages of the production and delivery chains, leading to multiple relative price shocks

- Examples of supply-demand imbalances are legion: all categories of commodities, intermediate goods (especially electronic components), maritime freight, road transport, etc.
- Most of these shortages result from disruptions caused by the pandemic (asynchronous closures/re-openings between countries and sectors).
- In some cases, they also reflect the oligopolistic nature of many markets (gas, oil and cargo).
- They do not result from a reduction in supply-side capacity (no destruction of physical or human capital during the pandemic).

Inflation: second-round effects (wages)



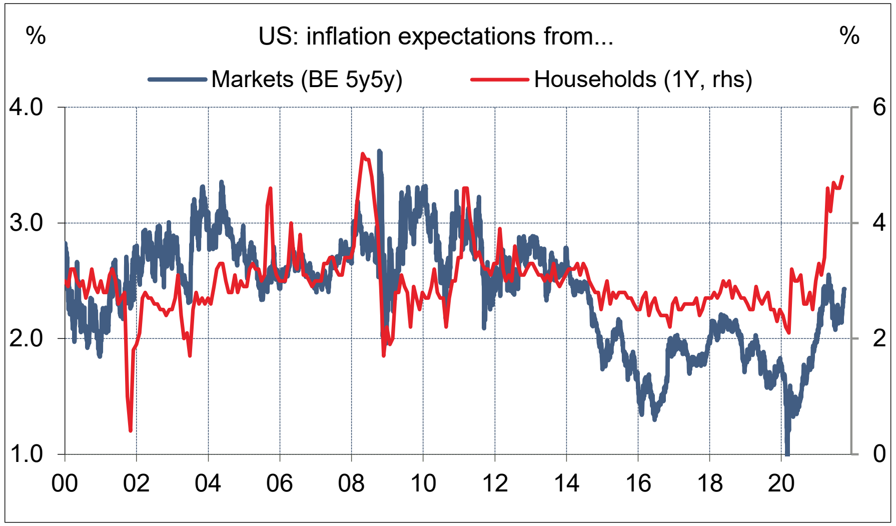


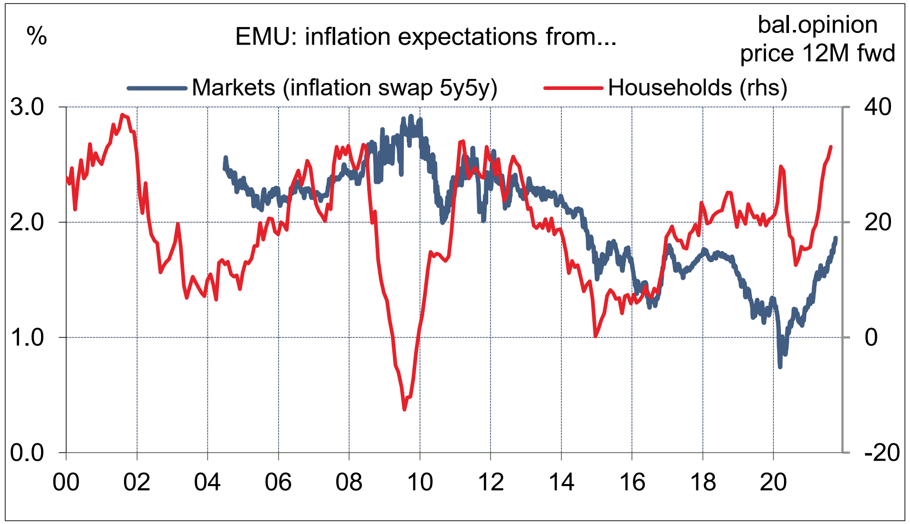
Sources: Thomson Reuters, Fed, ECB, ODDO BHF Securities

Hiring difficulties pre-dated the pandemic. They have been accentuated by it but are not uniform.

- US (flexible job market) – Employment was not protected during the pandemic (employment plunged in low-skilled and low-wage services), but unemployment insurance was raised significantly, overcompensating for the shock on disposable income. During the reopening phase, job turnover is soaring. Wage strains are high but localised. Apparent labour productivity grew during the pandemic. At this stage, there is no surge in unit labour costs (wages less productivity).
- Europe (rigid job market) – Employment was largely protected and household income was not overcompensated as in the US (resulting in fewer excess savings). Labour mobility is low and under-employment remains high. There are no clear signs of a surge in negotiated wages.

Inflation: second-round effects (inflation expectations)





Sources: Thomson Reuters, Bloomberg, ODDO BHF Securities

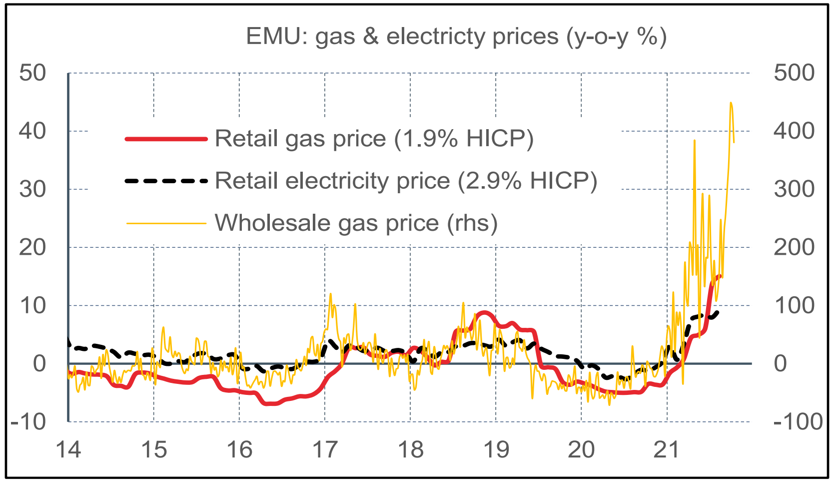
The concept of "inflation expectations" is omnipresent in economic models (Taylor rules). But it is extremely vague.

- Empirical work tends to show that "inflation expectations" are fairly poor predictors of future inflation. Many available indicators are far more closely correlated to past or present inflation than to future inflation.
- In general, inflation expectations drawn from surveys of professional forecasters and businesses are considered more reliable than expectations drawn from consumer surveys or market variables (indexed bonds or inflation swaps). But consumer expectations are more important politically.
- All measures of expected inflation have rebounded from their spring 2020 trough. The increase is more pronounced and the absolute level is higher over short time horizons (1-3 years) than long ones (5-10 years). Even though the duration of the inflation shock has now surpassed what could be described as "*transitory*" (approximately one year), a hump-shaped profile remains the most widely expected. To the best of our knowledge, the advocates of stagflation 2.0 do not expect prices to continue accelerating over the medium term.

Inflation: the effects of the green transition

Power data (from electricityMap, GW)					
On Oct.19, 2021	Unused capacity*	Natural gas		Wind power	
		Prod.	Capacity	Prod.	Capacity
Main EU countries	**98**	**48**	**163**	**40**	**151**
o/w					
_Germany	28	6	31	18	63
_France	24	4	12	5	17
_Italy	10	19	50	0	11
_Spain	6	7	34	7	27
	gas dependence				
UK	11	12	40	11	25

*nuclear, oil, coal, biomass



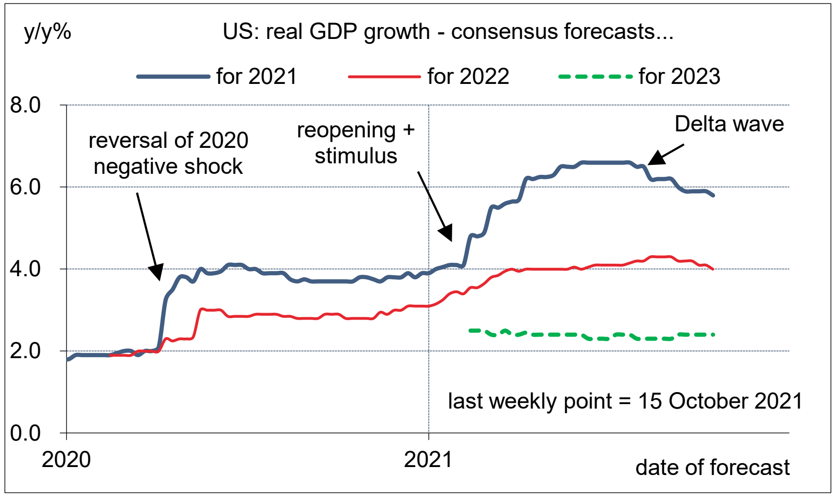
Sources: Thomson Reuters, Bloomberg, ODDO BHF Securities

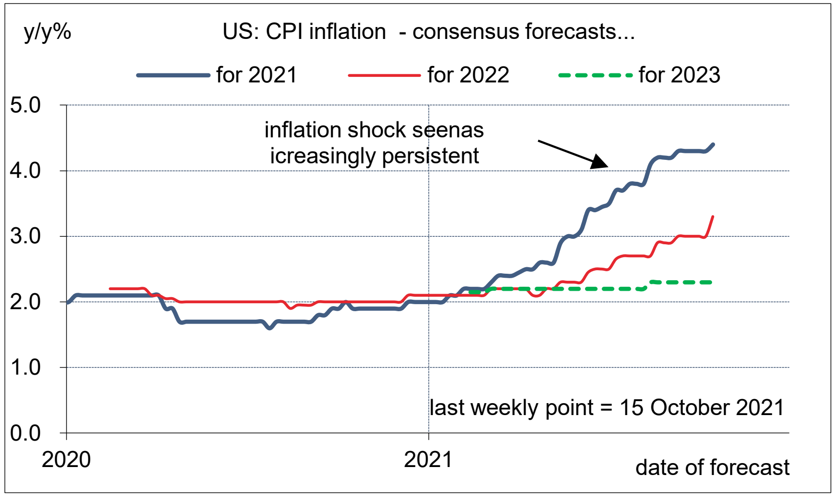
The surge in wholesale gas (and electricity) prices encompasses short-term strains (shortages) and long-term ones (green transition)

- The transition towards a decarbonised energy mix has been a global objective since the Paris climate agreement of 2015. Europe has set a carbon neutrality objective by 2050. This is a cornerstone of the EU's general policies. The increase in the relative price of energy is a key component of a policy seeking to shift from fossil fuels to renewable energies. Energy production capacity adjustable to demand fluctuations is on a downward trend.
- The current crisis has highlighted some of the weaknesses of this "green transition". The rebalancing of the energy mix is leading to greater price volatility in the short term (intermittence of production from renewable sources for lack of storage technology) and greater dependence on producers of gas, a more polluting energy source than nuclear.
- The recent spike in electricity prices has put governments in an uncomfortable position, caught between long-term objectives (encourage investments to facilitate the transitions and subsidise supply) and immediate objectives (protect consumer spending power from the shock and subsidise demand). Electoral constraints inherently favour short-term objectives. More volatile inflation (energy component = 9.5% of the eurozone price index) complicates the analysis of inflationary risk by central banks.

Economic conditions (US – Europe – China)

US economy: cold snap for activity, hotter inflation



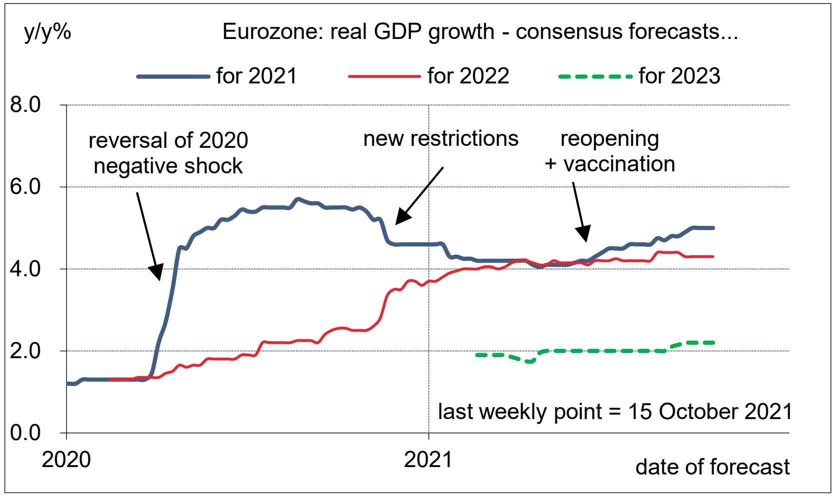


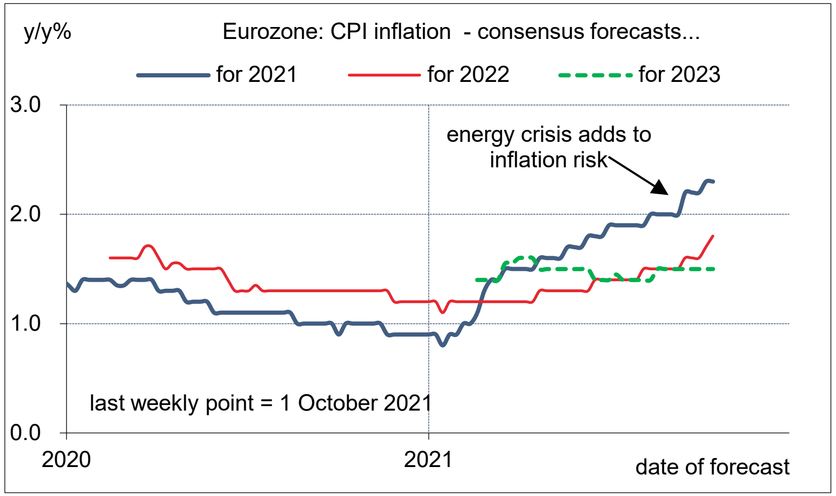
Sources: Bloomberg, ODDO BHF Securities

The US economic recovery is losing momentum and inflationary strains are mounting – the worst cocktail for the Fed

- The recent slowdown in the pace of growth in activity and employment coincides with the rising wave of contaminations with the Delta variant, taking a toll on sectors involving close social interactions, such as catering, travel and education. Vaccination coverage of the US population is lower today than in Europe.
- Accelerating inflation is eroding consumer spending power in the short term. Even so, their earned income continues to grow (employment + wages) and considerable surplus savings were built up during the pandemic. Consumer spending on goods is levelling off, but spending on services (two-thirds of the total) is on a fairly steady upward trend.
- Progress on fiscal stimulus programmes is faltering, either because of partisan divisions (risks of a shutdown and technical default) or because of disagreements within the Democratic camp. An agreement can only be reached on smaller amounts than those announced at the start of 2021 (a $ 1tn infrastructure spending plan is backed by both parties, while another $ 3.5tn social spending plan is rejected by Republicans).
- Most downward revisions to growth forecasts are concentrated today on Q3 and Q4 2021, but not on 2022. The expected easing of inflation has been pushed back, but this remains the predominant assumption among forecasters.

European economy: catch-up and outperformance in H2 2021



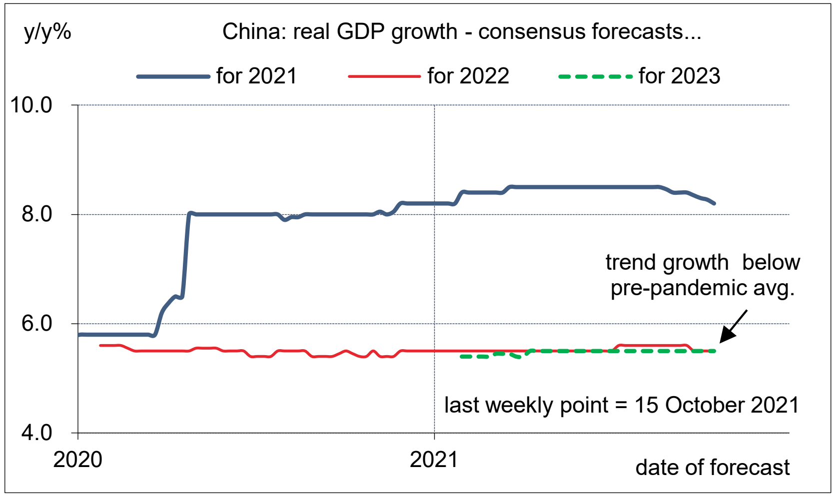


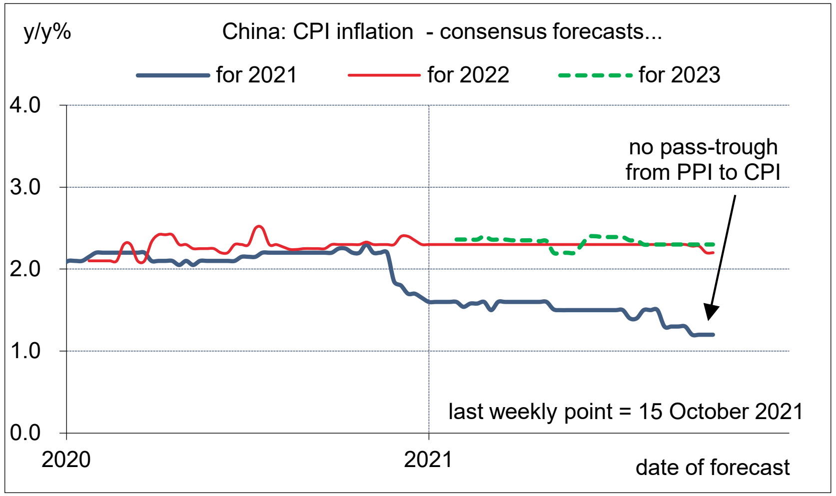
Sources: Bloomberg, ODDO BHF Securities

The eurozone continues to catch up lost ground. It has returned to its pre-pandemic GDP level at the end of 2021

- The extension of vaccination coverage in Western European countries has paved the way for a near-complete reopening of the economy. The Delta variant wave has had no visible effect on mobility, economic activity or the functioning of hospital and education systems.
- Emergency stabilisation measures (reduced activity systems and loan guarantees) are being withdrawn gradually. Economic policymakers have no appetite to tighten the policy mix beyond purely cyclical adjustments.
- Shortages of intrants are weighing on industrial activity, especially in the automotive sector, explaining the German economy’s relative underperformance of its neighbours in recent months. At this stage, the general view is that these shortages are postponing production but not eliminating it. By and large, recent growth revisions (consensus, OECD and IMF) have been modestly upwards.
- The inflation shock is significant by European standards. However, it is weaker than in the US and also appears less persistent because of different employment and wage conditions in the two regions. Headline inflation stands at 3.4% year-on-year. Stripping out the energy component and the direct effects of the pandemic, it is just 1.3% on our estimates. Inflation risk is monitored closely by governments because of its social implications (wage negotiations) and political implications (numerous measures have been adopted in order to offset rising energy bills).

China (1): double slowdown, cyclical and organic



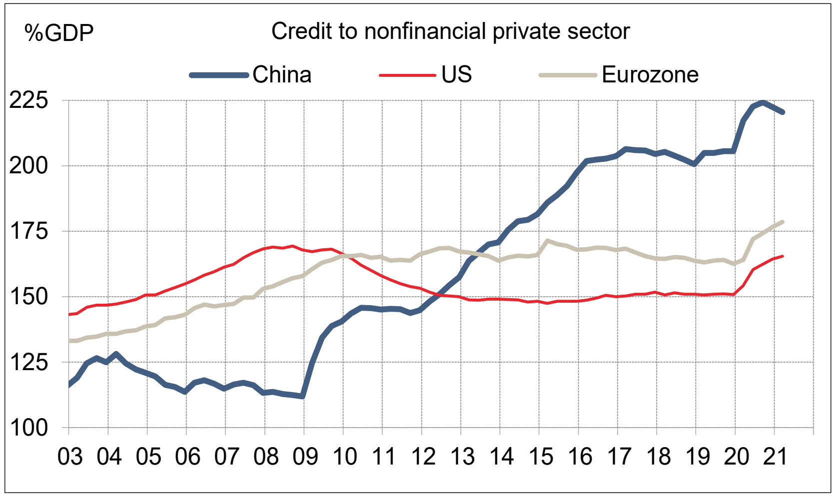


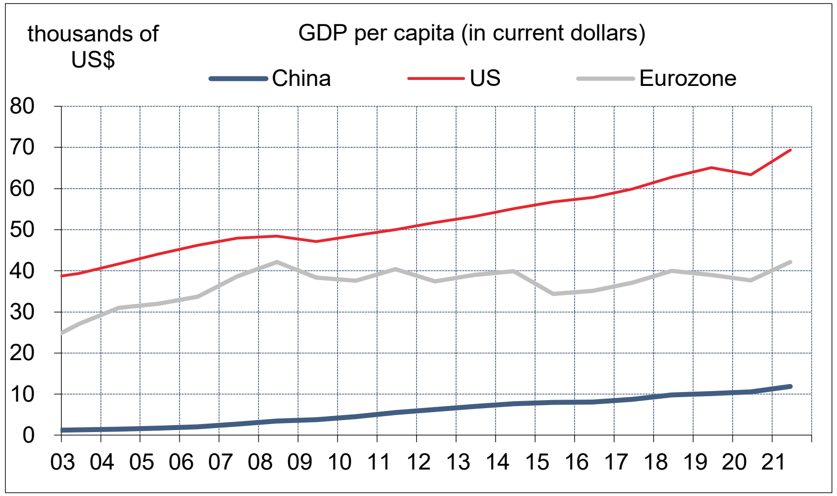
Sources: Bloomberg, ODDO BHF Securities

The Chinese economy stagnated over the summer. The balance of risks is on the downside in both the short and medium terms

- The official growth rate fell to an annualised 4.9% in Q3 2021, the lowest level ever recorded (leaving aside the exceptional shock of Q1 2020). This is the result of a confluence of factors of varying duration: lockdown measures in response to the Delta variant, closures of production sites in line with anti-pollution measures, tightening of credit conditions in H1 2021, and a plunge in residential construction activity amid government pressure to clean up and deleverage this sector (see following page).
- The growth slowdown is both cyclical and organic. Short-term stimulus measures are possible (liquidity injections by the central bank), but it seems clear that the authorities are engaged in a structural overhaul of the economic growth “model”. This involves a wave of regulatory measures putting stricter limits on activity in many sectors (property, fintech, social media, education, e-Commerce, online services, etc.).
- On the price front, China is in an unusual situation. The rise in production prices is setting one new record after another, but this does not appear to be having any repercussions on retail prices, which are tending to slow. The inflation outlook cannot escape the consequences of a deleveraging of the property sector. Some historical precedents (Japan in the 1990s and Spain post-2008) point in a deflationary direction.

China (2): deflate the property bubble





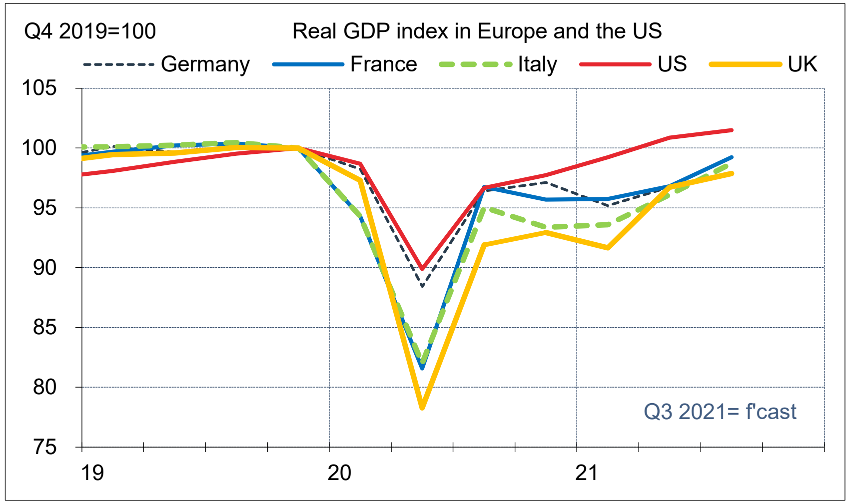
Sources: Thomson Reuters, BIS, ODDO BHF Securities

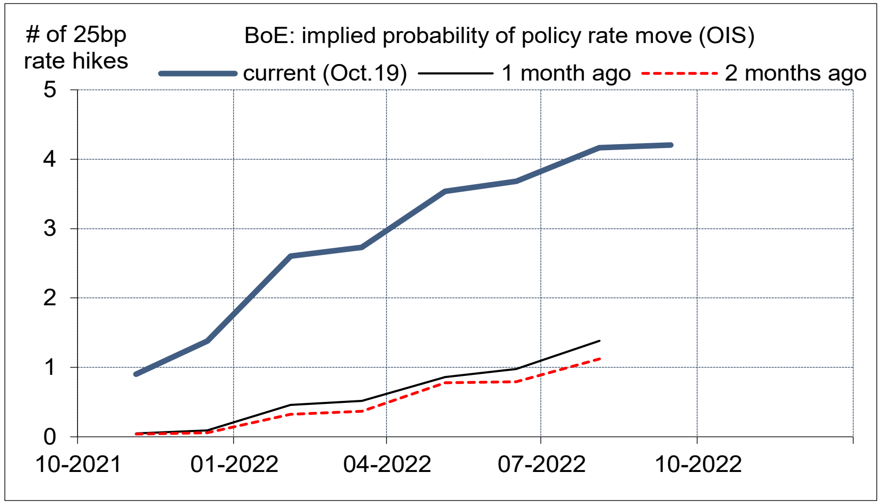
There is no immediate substitute for a reduction in the share of property investment in GDP

- For a middle-income country, China's private sector debt levels are excessive, far exceeding standards in the US or Europe. Its recent growth reflects strong growth in the residential construction sector. This is partly the effect of the urbanisation of the economy, a normal phenomenon in a growth phase, but other factors are at play (maximization of local government revenues and speculation).
- Rightly or wrongly, it is accepted that the difficulties of large property developers, particularly Evergrande, will have no global financial repercussions given that the Chinese financial system is tightly controlled and little integrated with the rest of the world. China is not dependent on foreign capital.
- However, a reduction in construction activity will necessarily have macroeconomic consequences. On some estimates, after taking into account the construction sector's upstream interactions with manufacturing and downstream interactions with property development, its weight represents over 25% of GDP. If this shares is reduced significantly, the growth slowdown is bound to worsen in the short term as there is no immediate compensation from other components of GDP, whether investment in equipment, consumer spending or external trade. Political considerations (extension of President Xi's term next year) and geopolitical considerations (technological rivalry with the US) add a large dose of opacity to government decisions.

Central banks
(BoE – Fed – ECB)

Bank of England: a very (overly?) restrictive turn



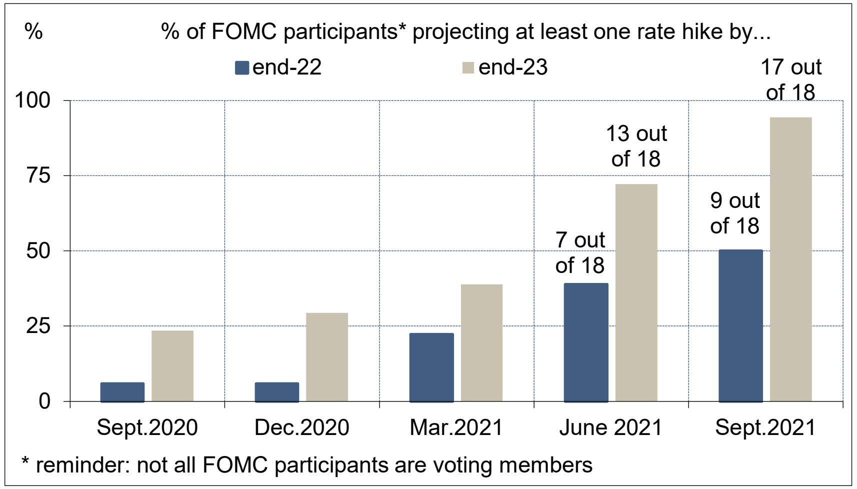


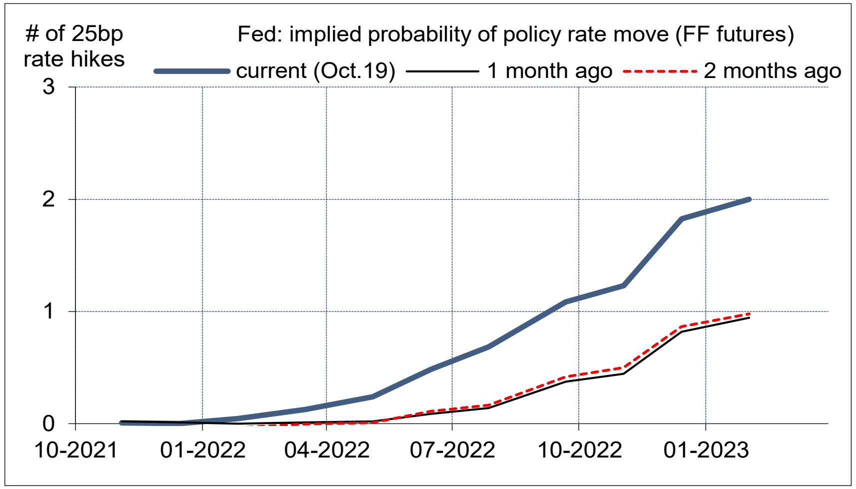
Sources: Thomson Reuters, Bloomberg, ODDO BHF Securities

The Bank of England claims it has to react to the inflation spike, preparing the groundwork for an imminent rate hike.

- Among large, advanced economies, the UK economy has consistently lagged behind since the start of the pandemic, with a steeper decline than its peers in Q2 2020 followed by a slower relative catch-up. The furlough system that still covered around 1.5m people this summer ended in October. Fiscal and monetary policy looks set to take a more restrictive turn in 2022.
- The problems of shortages caused by the pandemic and the energy transition have been accentuated by the consequences of Brexit (reduction in the number of EU workers, especially in some sensitive sectors, such as road transport and health services). This is a multi-faceted supply-side shock. The virus also continues to circulate more widely than on the continent, a source of uncertainty.
- In the manual of central banks, it is normally not recommended to tighten monetary policy in this type of situation, unless the inflation shock is judged to be persistent. This is a viewpoint staunchly advocated by several members of the MPC. Contrary to the mistake made by central banks in the 1970s, the theory is that it is preferable to act quickly to limit the scale and duration of monetary tightening.
- The markets are forecasting regular policy-rate increases throughout 2022.

Fed: jitters over the duration of the inflation shock



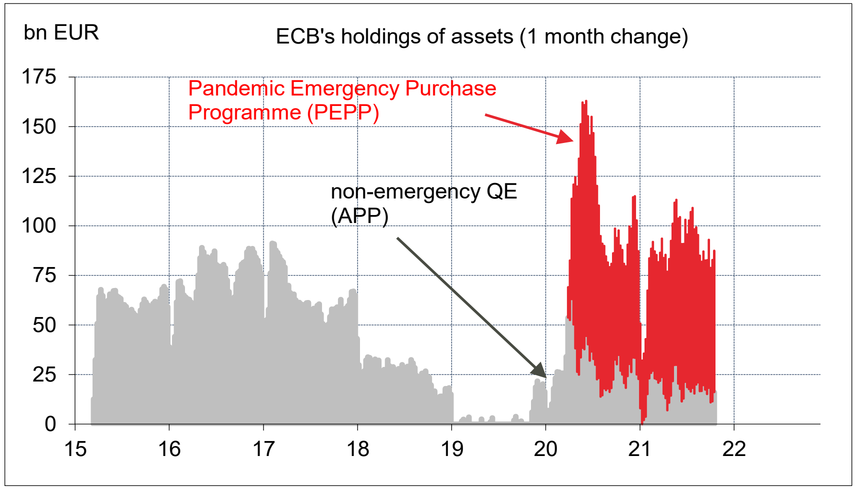


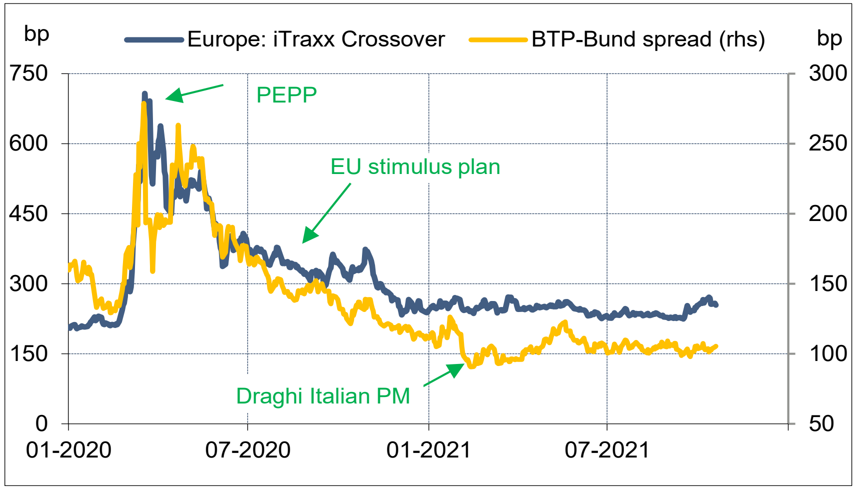
Sources: Fed, Bloomberg, ODDO BHF Securities

The Fed has not completely succeeded in decoupling tapering expectations from rate-tightening expectations

- The Fed is set to announce a reduction in its asset purchases at its 3 November meeting. This is the unanimous message conveyed by Fed officials over the past two months. The persistence of bottlenecks has not prompted the Fed to abandon the scenario of easing inflation, but this is now expected to be more delayed and gradual than a few months ago. Against the backdrop of a politicisation of inflation risk, the Fed needs to show its anti-inflationary credentials. The reduction in asset purchases is a low-cost gesture, especially given that, unlike in 2013, the tapering announcement is almost a non-event this time for the interest-rate markets.
- The QE programme relaunched in March 2020 is due to end in mid-2022, swelling the Fed’s balance sheet by around $ 5tn compared with the pre-pandemic situation. There is an academic debate over whether the compression on long-term rates results mainly from a flow effect (asset purchases) or a stock effect (holding of a large portfolio). In any case, the Fed does not intend to shrink the size of its balance sheet.
- Monetary normalisation is designed to be a sequential process. At present, no-one at the Fed is calling for both the end of QE and an exit from the zero-rate policy. But the gap between the two events will be a subject of thorny discussions over the coming months. Expectations in the futures markets are more aggressive than the FOMC’s forecasts.

ECB: fairly (overly?) zen in face of the inflation shock





Sources: ECB, Bloomberg, ODDO BHF Securities

The ECB stands by to "close spreads", at least as long as the economic recovery is not completely autonomous

- Memories of the monetary policy error of 2011 still linger at the ECB. At that time, the ECB raised its policy rate several times in response to a temporary surge in oil prices, and at the very moment when the post-financial crisis recovery was losing momentum. The message conveyed by the most influential people on the Council (Christine Lagarde, Isabel Schnabel and Philip Lane) is that the central bank should not react, and certainly not overreact, to specific price shocks when they are not having second-round effects – which is the case in the eurozone (see above).
- There is an ongoing discussion, due to be resolved in December, about what measures to take after the PEPP ends in March 2022. The median position that may garner a wide consensus, if not unanimity, is to expand the APP programme and to attach to it in some circumstances (to be defined) certain attributes of the PEPP, especially in its flexibility.
- In short, the ECB seems ready to maintain an active and more prolonged presence in the credit markets than other central banks in a bid to maintain a strong compression of spreads. The implicit but predominant objective is financial stability, a pre-condition for having any hope of converging durably with the 2% inflation target. At present, the ECB's central forecast is below this targets for 2022 and 2023. Consequently, a debate over rate hikes (exit from negative rates) does not appear imminent.

Appendix – Statistics and charts

1. Real GDP growth in the major countries (% quarterly change)
2. Contributions to real GDP growth: G7 countries
3. Real GDP growth: G7 countries + China
4. Real GDP growth: countries of Asia excl. China-Japan (selection)
5. Real GDP growth: other countries (selection)
6. Industrial production: G7 + emerging countries (selection)
7. Consumer price inflation: G7 countries + China
8. Consumer price inflation: emerging countries (selection)
9. Unemployment rates: G7 countries
10. Purchasing managers' confidence (PMI indices): G7 + BRIC countries
11. Consumer confidence: developed countries (selection)
12. Car sales: G7 countries + China + Brazil
13. Central bank policy rates: developed countries (selection)
14. Central bank policy rates: emerging countries (selection)
15. Central bank balance sheets: developed countries (selection)
16. Currency reserves: world and principal holders
17. Current account balances: G7 countries + China
18. Current account balances: emerging countries (selection)
19. Exchange rates against the EUR or USD: major currencies
20. Government debt (as % of GDP): European countries (selection)
21. Sovereign ratings: European countries (selection)
22. Bank financing by the Eurosystem
23. Bank loans to the private sector: European countries (selection)
24. 10-year government bond yield

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

	GDP 2019	Weights 2019		Real GDP change (Q/Q non annualised, %)																				
	bn $	current $	PPP $	2017				2018				2019				2020				2021			
		%	%	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
World *	**87451**	100.0	100.0	**1.0**	**1.1**	**1.1**	**1.0**	**1.1**	**1.0**	**0.5**	**0.5**	**1.0**	**1.0**	**0.5**	**0.3**	**-3.0**	**-6.9**	**8.7**	**2.2**	**0.8**	**0.7**	**1.3**	e
Developed countries	46617	53.3	37.7	0.6	0.6	0.7	0.8	0.4	0.6	0.2	0.4	0.6	0.5	0.5	0.0	-2.0	-10.4	9.5	0.9	0.4	1.8	1.3	e
Asia excl.Japan	22618	25.9	32.7	1.5	1.7	1.7	1.3	1.8	1.6	1.0	1.0	1.7	1.5	0.7	0.7	-4.8	-1.4	7.3	3.7	1.1	-0.7	1.6	e
US	21373	24.4	15.8	0.5	0.6	0.7	0.9	0.8	0.8	0.5	0.2	0.6	0.8	0.7	0.5	-1.3	-8.9	7.5	1.1	1.5	1.6	-	
EMU	13409	15.3	12.5	0.7	0.8	0.7	0.9	0.0	0.5	0.1	0.6	0.7	0.2	0.3	0.0	-3.5	-11.7	12.6	-0.4	-0.3	2.1	-	
- Germany	3889	4.4	3.5	1.2	0.8	0.9	0.8	-0.4	0.6	-0.4	0.4	1.1	-0.5	0.4	-0.1	-1.8	-10.0	9.0	0.7	-2.0	1.6	-	
- France	2729	3.1	2.4	0.8	0.8	0.6	0.8	0.0	0.4	0.4	0.7	0.6	0.5	0.2	-0.4	-5.7	-13.5	18.6	-1.1	0.0	1.1	-	
- Italy	2005	2.3	2.0	0.5	0.4	0.4	0.5	0.0	0.0	0.1	0.3	0.0	0.1	0.2	-0.5	-5.7	-13.1	15.9	-1.7	0.2	2.7	-	
Japan	5136	5.9	4.1	0.7	0.2	0.8	0.4	0.0	0.0	-0.7	0.4	0.3	0.2	0.1	-1.9	-0.6	-7.9	5.4	2.8	-1.1	0.5	-	
UK	2833	3.2	2.4	0.6	0.3	0.4	0.4	0.2	0.5	0.6	0.3	0.6	0.1	0.5	0.0	-2.7	-19.6	17.4	1.1	-1.4	5.5	-	
Switzerland	732	0.8	0.5	0.2	0.3	0.6	1.1	1.1	0.9	-0.2	0.2	0.3	0.4	0.6	0.5	-1.6	-6.2	6.4	-0.1	-0.4	1.8	-	
Canada	1742	2.0	1.4	1.1	1.0	0.4	0.5	0.7	0.6	0.7	0.3	0.1	1.1	0.5	0.1	-2.0	-11.3	9.1	2.2	1.4	-0.3	-	
Australia	1392	1.6	1.0	0.2	0.7	1.1	0.5	0.8	0.8	0.5	0.1	0.4	0.6	0.8	0.4	-0.3	-7.0	3.6	3.2	1.9	0.7	-	
China	14341	16.4	17.3	1.8	1.8	1.6	1.6	1.8	1.7	1.3	1.5	1.6	1.4	1.2	1.5	-9.5	10.7	2.9	3.2	0.2	1.2	0.2	
Hong Kong	363	0.4	0.3	0.6	0.9	0.8	1.1	1.4	-0.1	0.1	-0.3	0.7	-0.6	-3.4	-0.4	-5.0	-0.4	2.4	0.5	5.5	-0.9	-	
India **	2871	3.3	7.1	1.3	2.2	2.2	1.4	2.1	1.8	0.8	0.2	2.8	2.0	-0.5	-0.9	2.4	-24.4	20.4	7.7	2.5	-6.2	-	
Korea	1651	1.9	1.7	1.0	0.7	1.5	-0.3	1.1	0.6	0.7	0.8	-0.2	1.0	0.4	1.3	-1.3	-3.2	2.2	1.1	1.7	0.8	-	
Indonesia **	1120	1.3	2.5	1.4	1.3	1.2	1.0	1.5	1.7	1.1	0.5	1.6	1.8	1.1	0.0	0.0	-6.2	3.0	1.3	1.5	1.0	-	
Taiwan	612	0.7	0.9	0.8	0.6	1.2	0.6	1.1	0.3	0.2	0.8	0.5	1.5	0.7	1.1	-0.4	-0.7	4.3	1.4	3.1	-1.1	-	
Thailand	544	0.6	1.0	1.3	1.5	1.1	0.0	2.4	1.3	-0.4	0.3	1.6	1.0	-0.2	-1.4	-1.5	-9.2	6.1	0.8	0.2	0.4	-	
Malaysia **	365	0.4	0.7	1.7	1.5	1.5	1.0	1.4	1.4	0.7	0.5	2.0	1.9	0.0	-0.7	-0.5	-16.1	17.3	-1.5	2.7	-2.0	-	
Philippines	377	0.4	0.7	1.8	2.0	1.9	0.7	1.8	1.9	1.8	0.2	2.6	1.0	1.8	1.3	-4.8	-15.1	8.5	3.7	0.7	-1.3	-	
Singapore	374	0.4	0.4	0.8	0.2	2.4	1.1	0.8	0.5	0.6	-0.2	0.8	0.3	0.3	0.1	-0.6	-13.1	9.0	3.8	3.3	-1.4	0.8	
Brazil	1878	2.1	2.4	1.1	0.7	0.3	0.4	0.5	0.2	0.8	-0.3	0.7	0.5	0.0	0.3	-2.3	-9.0	7.7	3.1	1.2	-0.1	-	
Chile	279	0.3	0.4	-0.8	1.0	1.8	0.9	1.1	0.9	-0.3	1.1	-0.3	1.1	0.8	-3.8	1.9	-12.7	5.4	6.5	3.4	1.0	-	
Mexico	1269	1.5	1.9	0.5	0.3	-0.3	1.3	1.2	0.0	0.3	-0.3	0.2	-0.2	0.1	-1.0	-0.9	-17.3	12.7	3.3	1.1	1.5	-	
Russia **	1690	1.9	3.1	0.8	0.6	0.3	-0.5	1.8	1.0	0.2	-0.2	-0.6	1.8	0.5	0.3	-1.0	-7.8	5.4	2.0	0.2	2.3	-	
Poland	597	0.7	1.0	0.9	0.9	1.2	1.8	1.2	1.3	1.5	0.9	1.8	0.6	1.2	0.3	-0.1	-9.2	7.7	-0.3	1.3	2.1	-	
Turkey	761	0.9	1.8	1.4	2.3	1.5	1.9	1.5	0.7	-1.6	-3.2	1.9	2.4	0.1	1.4	0.4	-10.8	16.4	1.2	2.2	0.9	-	
South Africa	388	0.4	0.6	0.5	0.5	0.1	0.5	0.5	-0.4	1.1	0.3	-1.0	0.5	-0.1	0.1	0.2	-17.4	13.6	2.8	0.8	1.2	-	

* world weighting is based on real GDP at PPP exchange rate (IMF data). ** seasonaly-adjusted figures by ODDO BHF

Source: Thomson Reuters, ODDO BHF Securities

Appendix 2: Contributions to real GDP growth: G7 countries

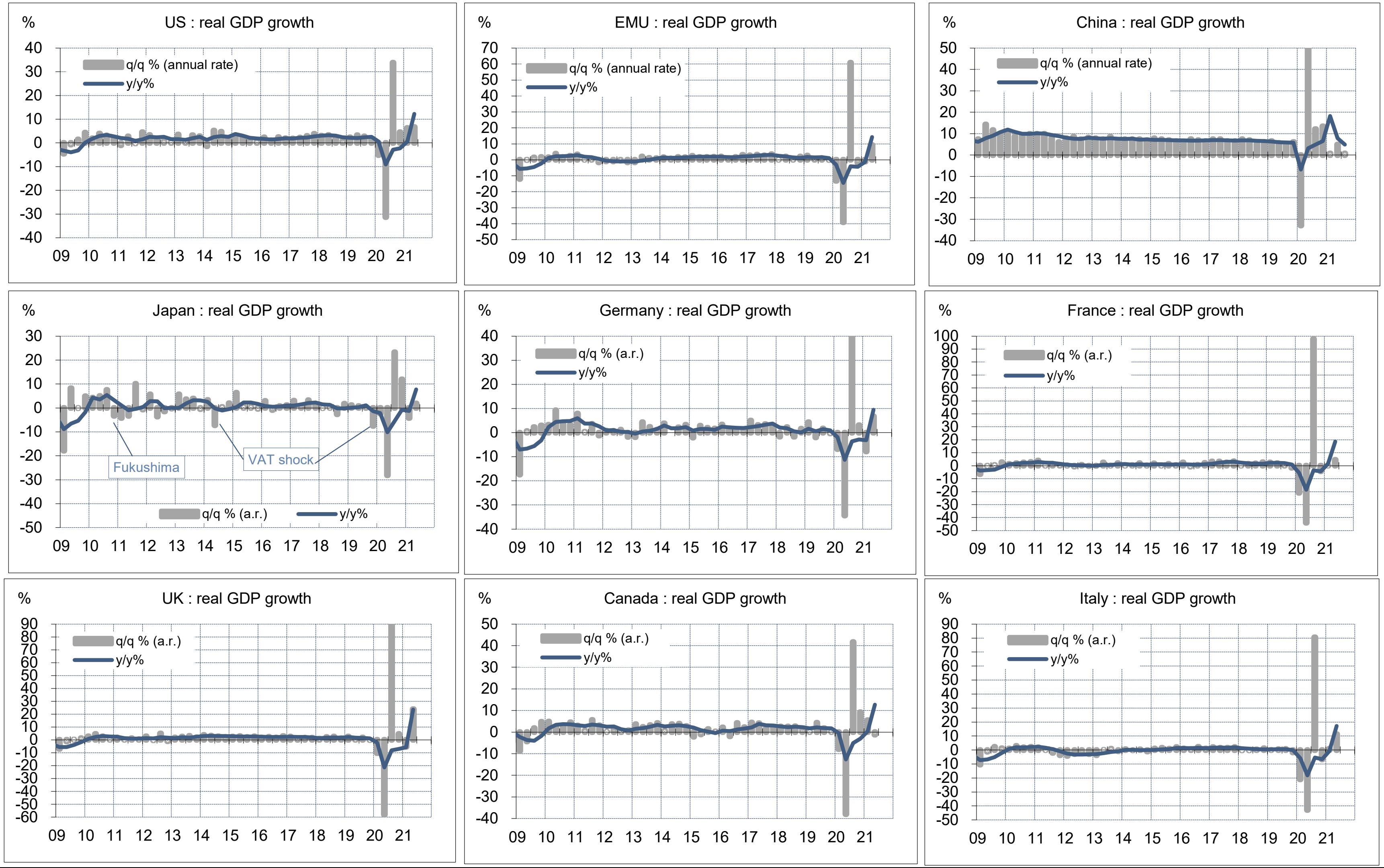
Real GDP change (Q/Q non annualised, %) and contributions to growth *

	Pre-crisis 1999-2007	Crisis Q3 08-Q2 09	Post-crisis 2010-2019	Pandemic Q1-Q2 2021	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2
US																						
Real GDP qoq %	**0.7**	**-1.0**	**0.6**	**-5.1**	**0.5**	**0.6**	**0.7**	**0.9**	**0.8**	**0.8**	**0.5**	**0.2**	**0.6**	**0.8**	**0.7**	**0.5**	**-1.3**	**-8.9**	**7.5**	**1.1**	**1.5**	**1.6**
- Inventories	0.0	-0.3	0.0	-0.6	-0.3	0.1	0.2	-0.1	0.1	-0.2	0.4	0.0	0.1	-0.1	-0.1	-0.2	-0.1	-1.0	1.7	0.3	-0.7	-0.3
- Net exports	-0.1	0.3	0.0	0.2	0.1	-0.1	0.1	-0.1	0.0	0.1	-0.4	-0.1	0.1	-0.1	0.0	0.4	0.0	0.4	-0.8	-0.4	-0.4	0.0
- Final demand	0.8	-1.0	0.6	-4.7	0.7	0.5	0.4	1.2	0.7	1.0	0.5	0.3	0.4	1.1	0.7	0.4	-1.2	-8.3	6.7	1.3	2.6	2.0
Japan																						
Real GDP qoq %	**0.3**	**-1.6**	**0.2**	**-4.3**	**0.7**	**0.2**	**0.8**	**0.4**	**0.0**	**0.0**	**-0.7**	**0.4**	**0.3**	**0.2**	**0.1**	**-1.9**	**-0.6**	**-7.9**	**5.4**	**2.8**	**-1.1**	**0.5**
- Inventories	0.0	-0.4	0.0	0.1	0.2	0.1	0.6	0.1	-0.2	-0.2	0.3	0.0	0.0	0.0	-0.2	-0.1	0.2	0.1	-0.2	-0.5	0.4	-0.3
- Net exports	0.1	-0.5	0.0	-1.7	0.1	-0.3	0.5	0.0	0.1	0.0	-0.2	-0.4	0.2	-0.3	-0.3	0.6	-0.3	-3.1	2.8	1.1	-0.3	-0.4
- Final demand	0.2	-0.7	0.2	-2.7	0.4	0.4	-0.3	0.4	0.1	0.2	-0.7	0.8	0.1	0.5	0.7	-2.5	-0.4	-4.9	2.8	2.3	-1.2	1.2
Germany																						
Real GDP qoq %	**0.4**	**-1.7**	**0.5**	**-5.9**	**1.2**	**0.8**	**0.9**	**0.8**	**-0.4**	**0.6**	**-0.4**	**0.4**	**1.1**	**-0.5**	**0.4**	**-0.1**	**-1.8**	**-10.0**	**9.0**	**0.7**	**-2.0**	**1.6**
- Inventories	0.0	-0.6	0.0	-0.2	0.4	0.2	-0.1	0.0	-0.5	0.3	0.7	-0.3	-0.1	0.0	-0.4	0.2	0.1	-0.4	-1.8	0.5	1.9	0.1
- Net exports	0.2	-0.9	0.0	-1.7	0.5	-0.1	0.5	0.2	0.0	-0.3	-1.2	0.0	0.2	-0.4	0.4	-0.2	-1.0	-2.3	3.6	1.0	-1.0	-0.5
- Final demand	0.2	-0.3	0.4	-4.1	0.3	0.7	0.5	0.6	0.1	0.6	0.1	0.7	1.0	-0.1	0.4	-0.1	-0.9	-7.3	7.2	-0.8	-2.9	2.0
France																						
Real GDP qoq %	**0.6**	**-0.9**	**0.3**	**-9.6**	**0.8**	**0.8**	**0.6**	**0.8**	**0.0**	**0.4**	**0.4**	**0.7**	**0.6**	**0.5**	**0.2**	**-0.4**	**-5.7**	**-13.5**	**18.6**	**-1.1**	**0.0**	**1.1**
- Inventories	0.0	-0.6	0.0	0.5	0.6	-0.6	0.2	0.2	0.0	0.2	-0.4	0.1	0.2	0.1	-0.3	-0.3	0.3	0.7	-2.7	0.6	0.4	0.1
- Net exports	-0.1	0.0	0.0	-0.8	-0.7	1.0	-0.2	0.2	0.0	-0.1	0.4	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	-1.6	0.5	0.8	-0.4	-0.3
- Final demand	0.6	-0.3	0.3	-9.3	0.9	0.5	0.7	0.4	0.1	0.2	0.4	0.6	0.7	0.6	0.6	0.1	-6.0	-12.6	20.8	-2.5	0.0	1.3
Italy																						
Real GDP qoq %	**0.4**	**-1.7**	**0.1**	**-9.4**	**0.5**	**0.4**	**0.4**	**0.5**	**0.0**	**0.0**	**0.1**	**0.3**	**0.0**	**0.1**	**0.2**	**-0.5**	**-5.7**	**-13.1**	**15.9**	**-1.7**	**0.2**	**2.7**
- Inventories	0.0	-0.5	0.0	0.1	-0.1	0.6	-0.4	0.3	-0.3	0.1	-0.2	0.4	-0.6	0.0	0.3	-0.6	0.7	-0.5	-1.4	0.5	0.7	-0.8
- Net exports	0.0	-0.3	0.1	-1.7	0.4	-0.6	0.3	-0.2	0.0	-0.4	0.4	-0.2	0.8	-0.1	-0.2	0.5	-0.9	-2.5	4.3	-1.1	-0.6	0.3
- Final demand	0.4	-1.0	-0.1	-7.8	0.2	0.4	0.5	0.4	0.2	0.3	-0.1	0.2	-0.1	0.2	0.1	-0.3	-5.5	-10.1	13.0	-1.1	0.1	3.1
EMU																						
Real GDP qoq %	**0.6**	**-1.4**	**0.3**	**-7.6**	**0.7**	**0.8**	**0.7**	**0.9**	**0.1**	**0.5**	**0.1**	**0.5**	**0.7**	**0.2**	**0.3**	**0.0**	**-3.5**	**-11.7**	**12.6**	**-0.4**	**-0.3**	**2.2**
- Inventories	0.0	-0.4	0.0	0.1	0.0	0.2	-0.2	0.1	-0.1	0.1	0.3	0.0	-0.2	0.1	-0.1	-0.1	0.3	-0.2	-1.6	0.6	0.8	-0.2
- Net exports	0.0	-0.2	0.0	0.0	0.6	-1.2	1.5	0.3	-0.2	-0.1	-0.3	-0.7	0.8	-1.5	1.3	-2.1	-0.5	0.5	2.4	-0.1	0.1	0.1
- Final demand	0.5	-0.8	0.3	-7.6	0.1	1.8	-0.6	0.5	0.3	0.5	0.1	1.2	0.0	1.6	-0.9	2.1	-3.3	-11.9	11.8	-0.9	-1.2	2.4
UK																						
Real GDP qoq %	**0.6**	**-1.4**	**0.5**	**-11.1**	**0.6**	**0.3**	**0.4**	**0.4**	**0.2**	**0.5**	**0.6**	**0.3**	**0.6**	**0.1**	**0.5**	**0.0**	**-2.7**	**-19.6**	**17.4**	**1.1**	**-1.4**	**5.5**
- Inventories	-0.1	0.0	0.0	-0.3	-0.1	-0.2	0.0	-0.3	0.1	0.6	-0.5	0.7	2.7	-2.9	-0.9	-2.1	2.7	-3.4	3.0	2.7	0.1	-1.6
- Net exports	0.0	0.0	0.1	0.5	0.0	0.1	0.1	0.3	-0.2	-0.3	0.5	-0.8	-2.8	2.8	1.4	2.3	-2.6	3.6	-4.5	-2.2	1.3	1.0
- Final demand	0.8	-1.4	0.5	-11.3	0.7	0.3	0.3	0.5	0.3	0.2	0.7	0.5	0.8	0.2	0.0	-0.2	-2.8	-19.8	18.9	0.6	-2.8	6.1

** do not sum up exactly due to roundings*

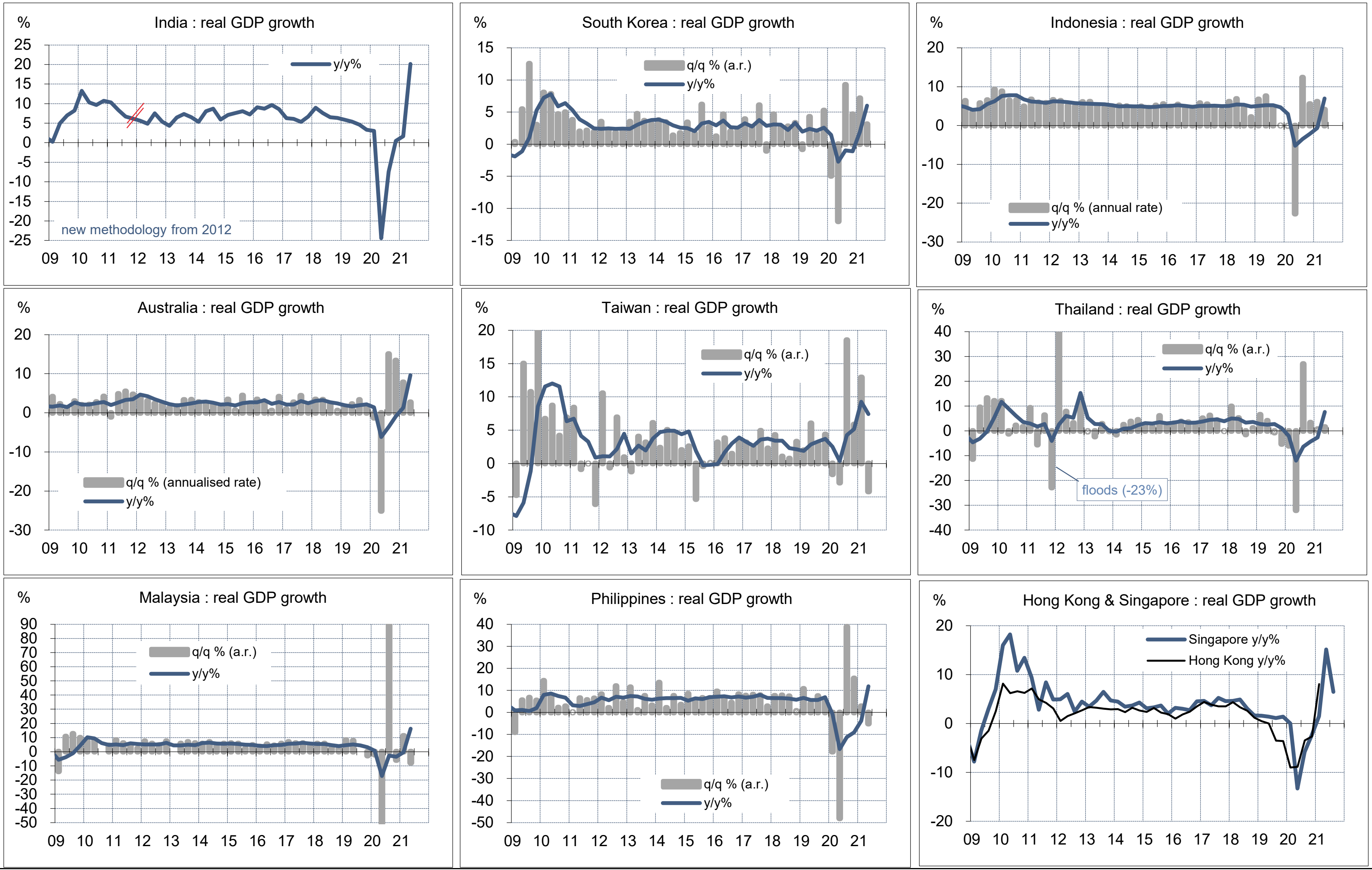
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 3: Real GDP growth: G7 countries + China



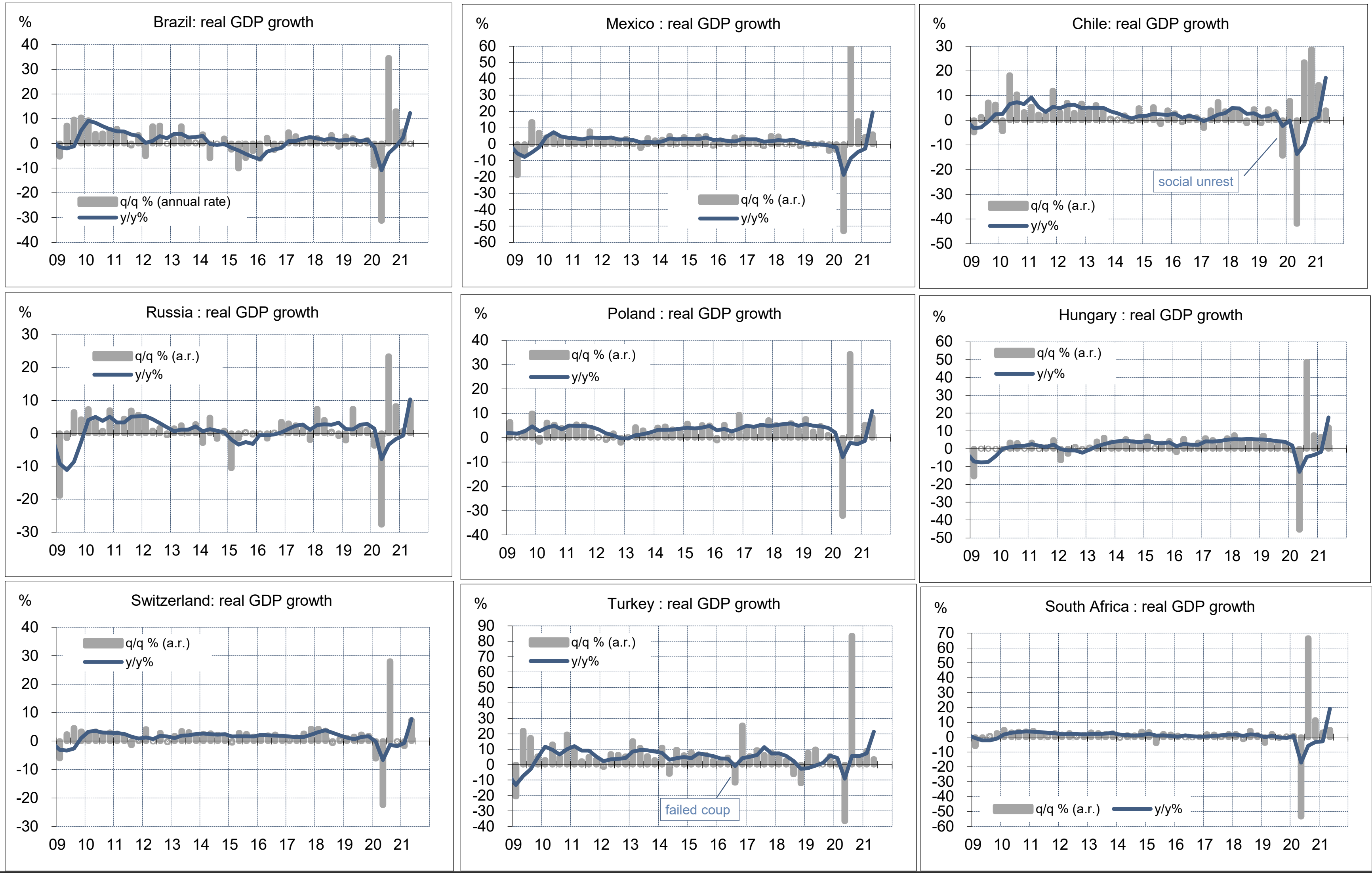
Sources: Thomson Reuters, ODDO BHF Securities

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



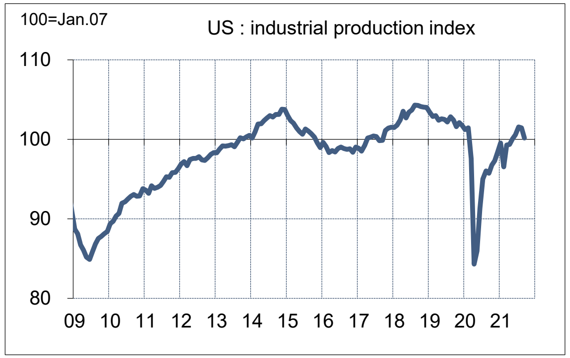
Sources: Thomson Reuters, ODDO BHF Securities

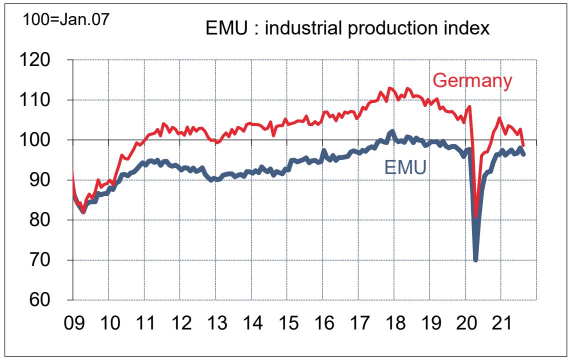
Appendix 5: Real GDP growth: other countries (selection)

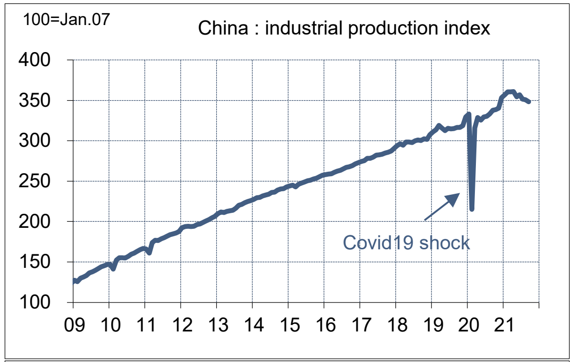


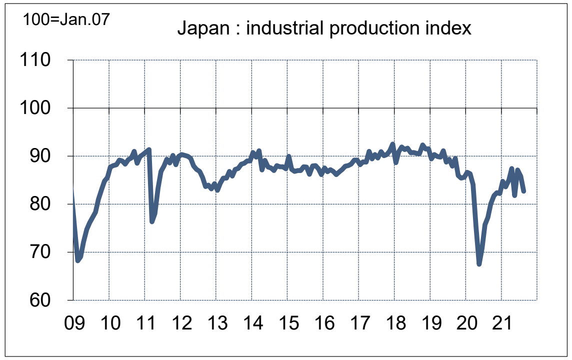
Sources: Thomson Reuters, ODDO BHF Securities

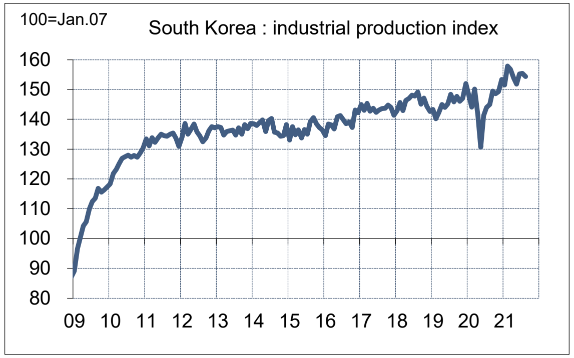
Appendix 6: Industrial production (index): selected countries

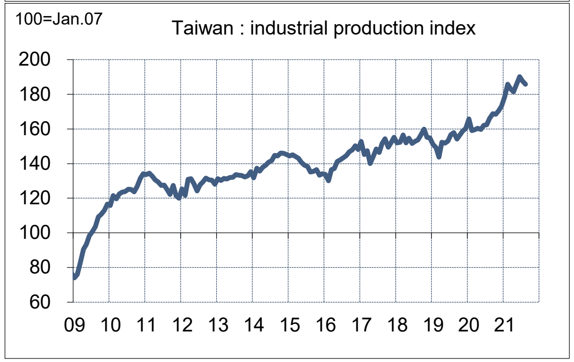


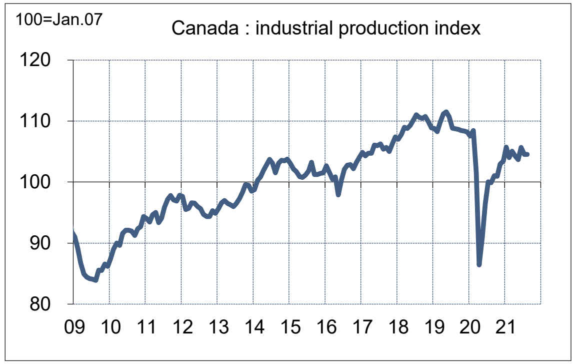


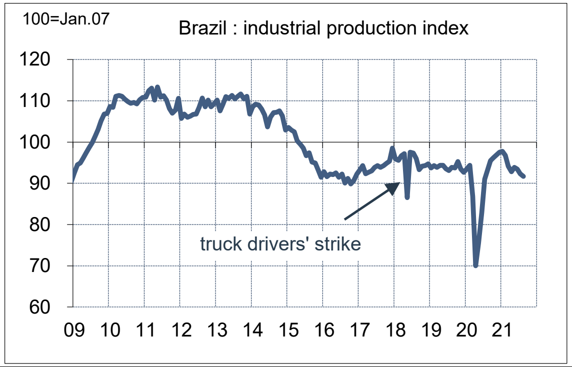






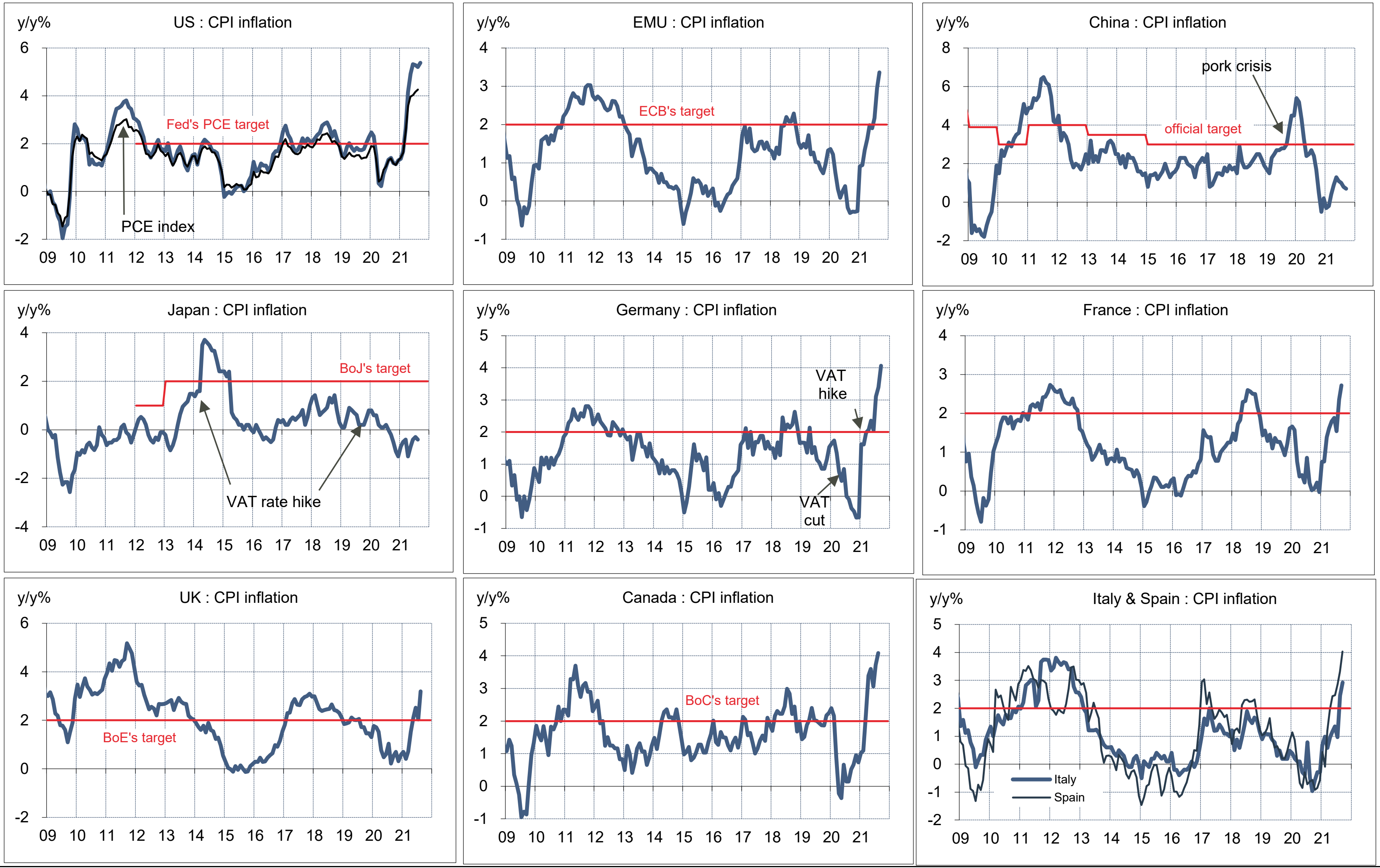






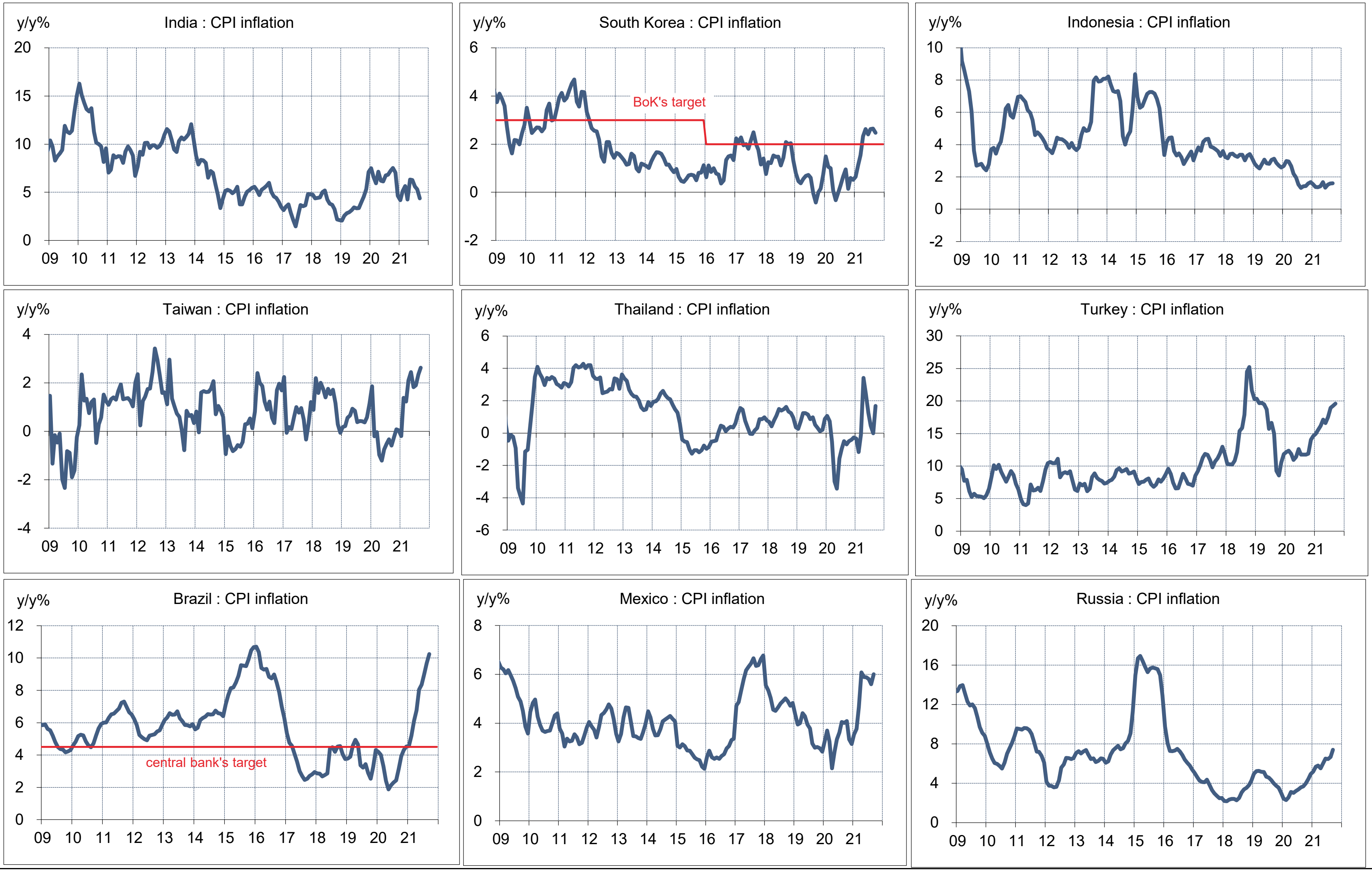
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 7: Consumer price inflation: G7 countries + China



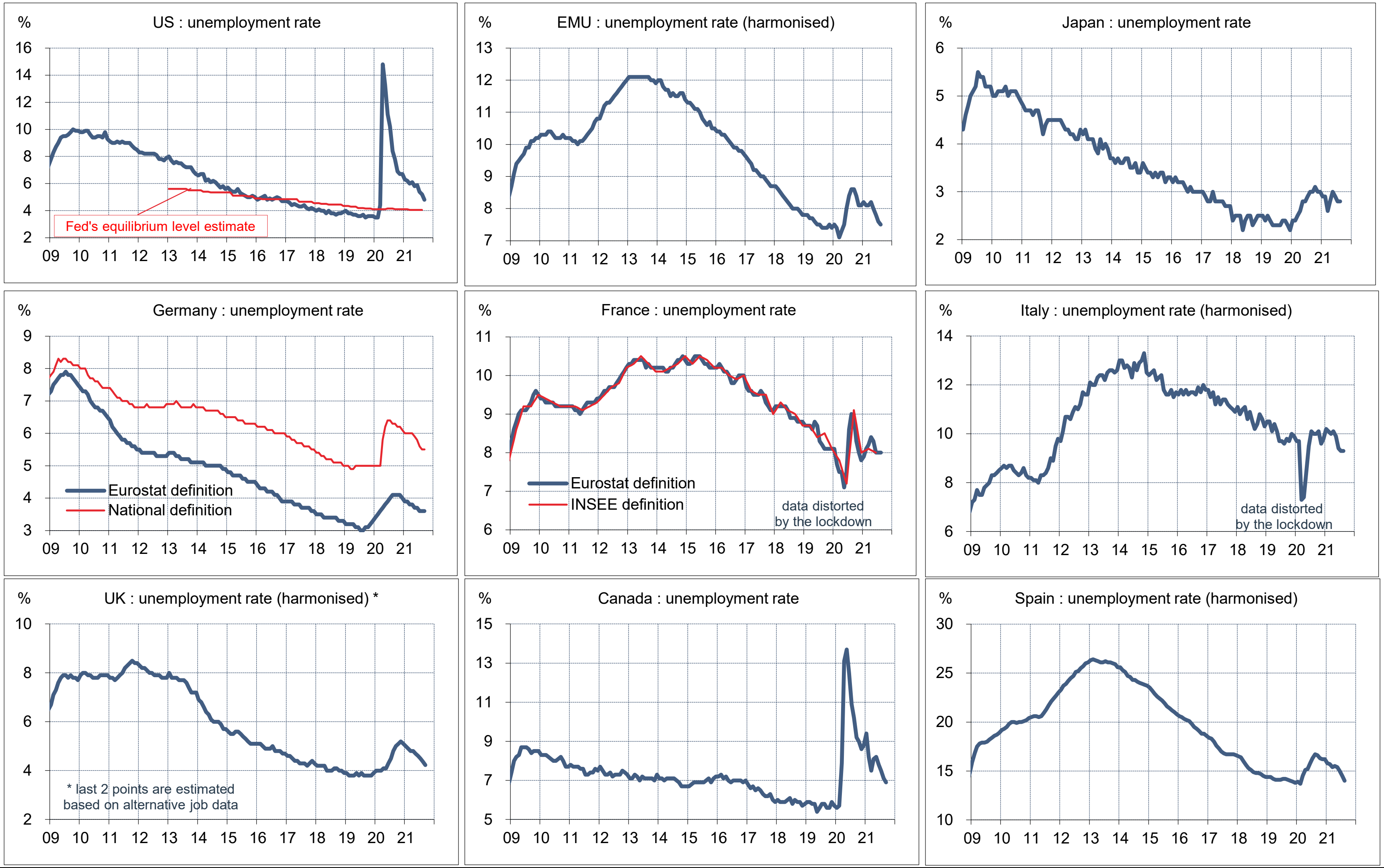
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 8: Consumer price inflation: emerging countries (selection)



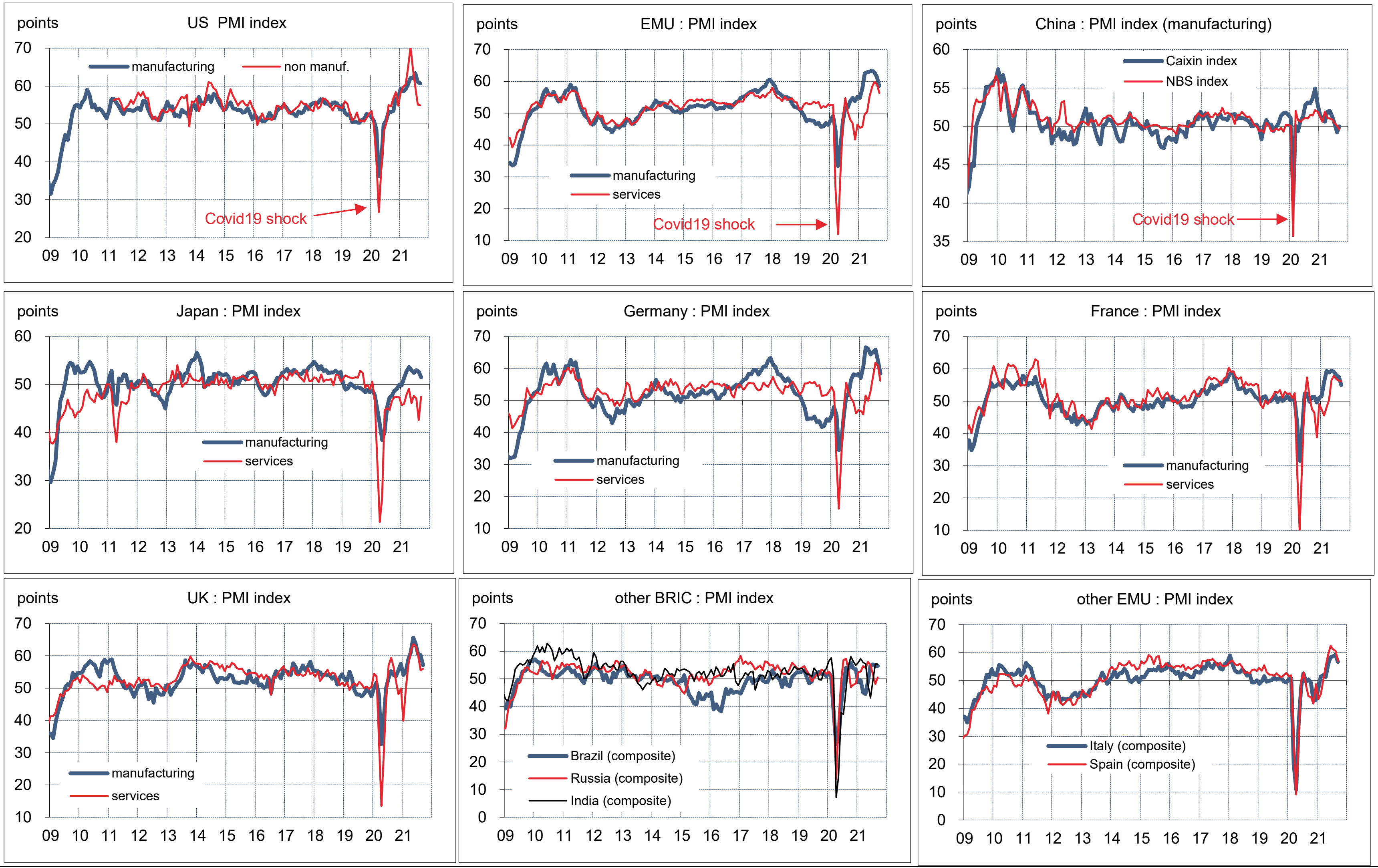
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 9: Unemployment rates: G7 countries



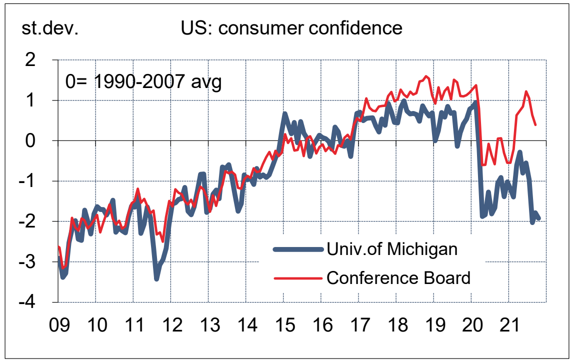
Sources: Thomson Reuters, ODDO BHF Securities

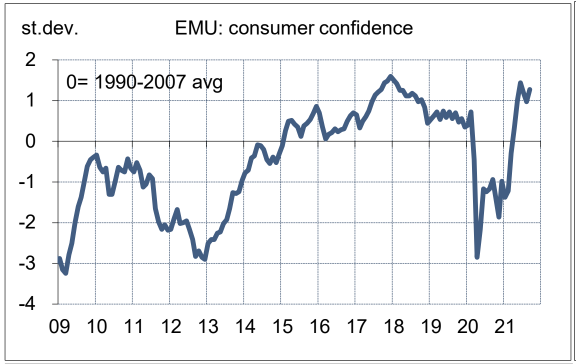
Appendix 10: Purchasing managers' confidence (PMI indices): G7 + BRIC countries

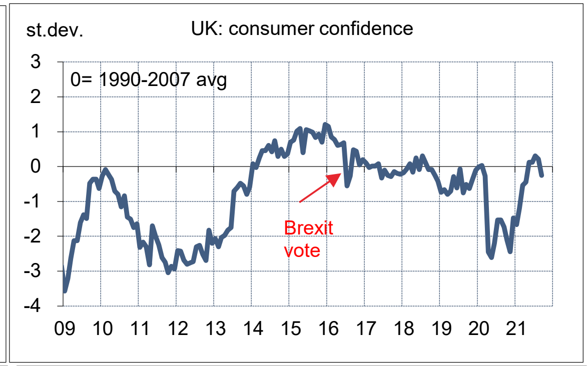


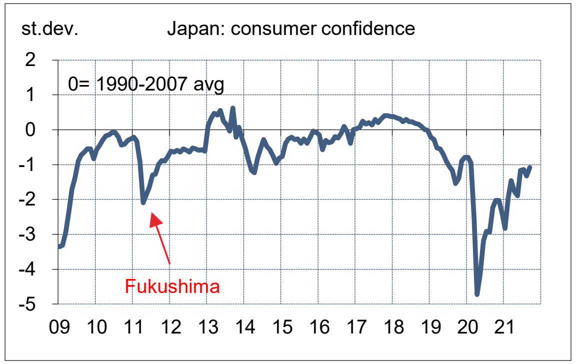
Sources: Thomson Reuters, ODDO BHF Securities

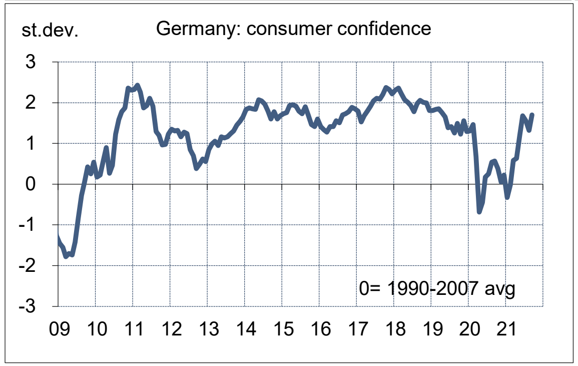
Appendix 11: Consumer confidence: developed countries (selection)

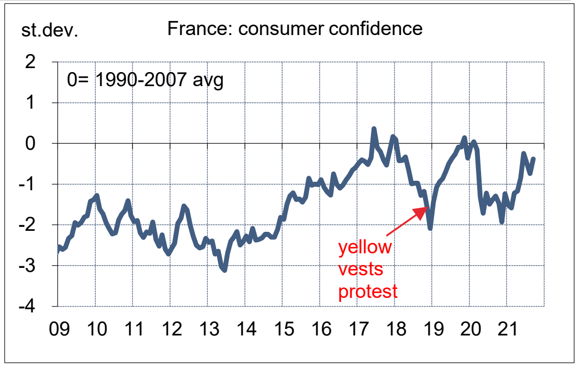


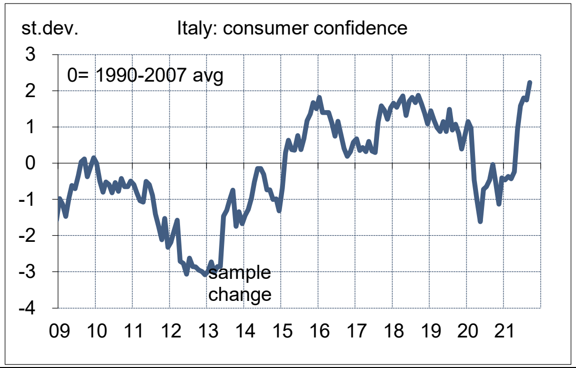


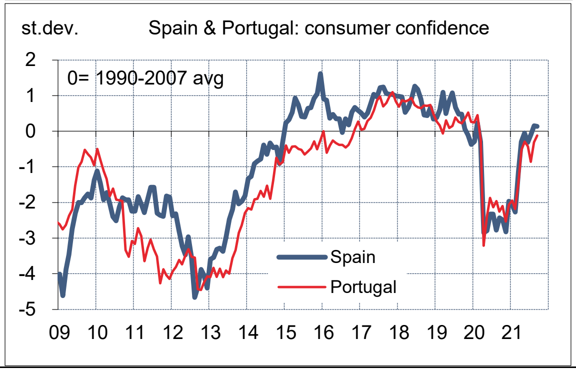


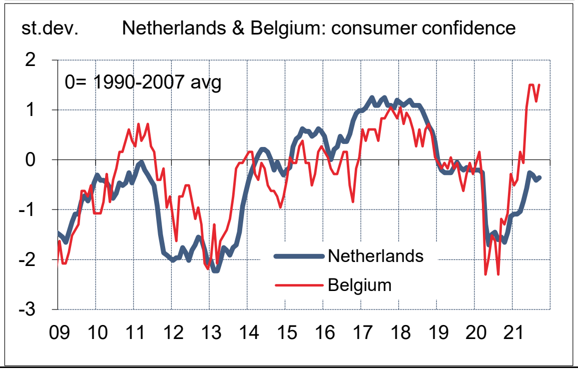






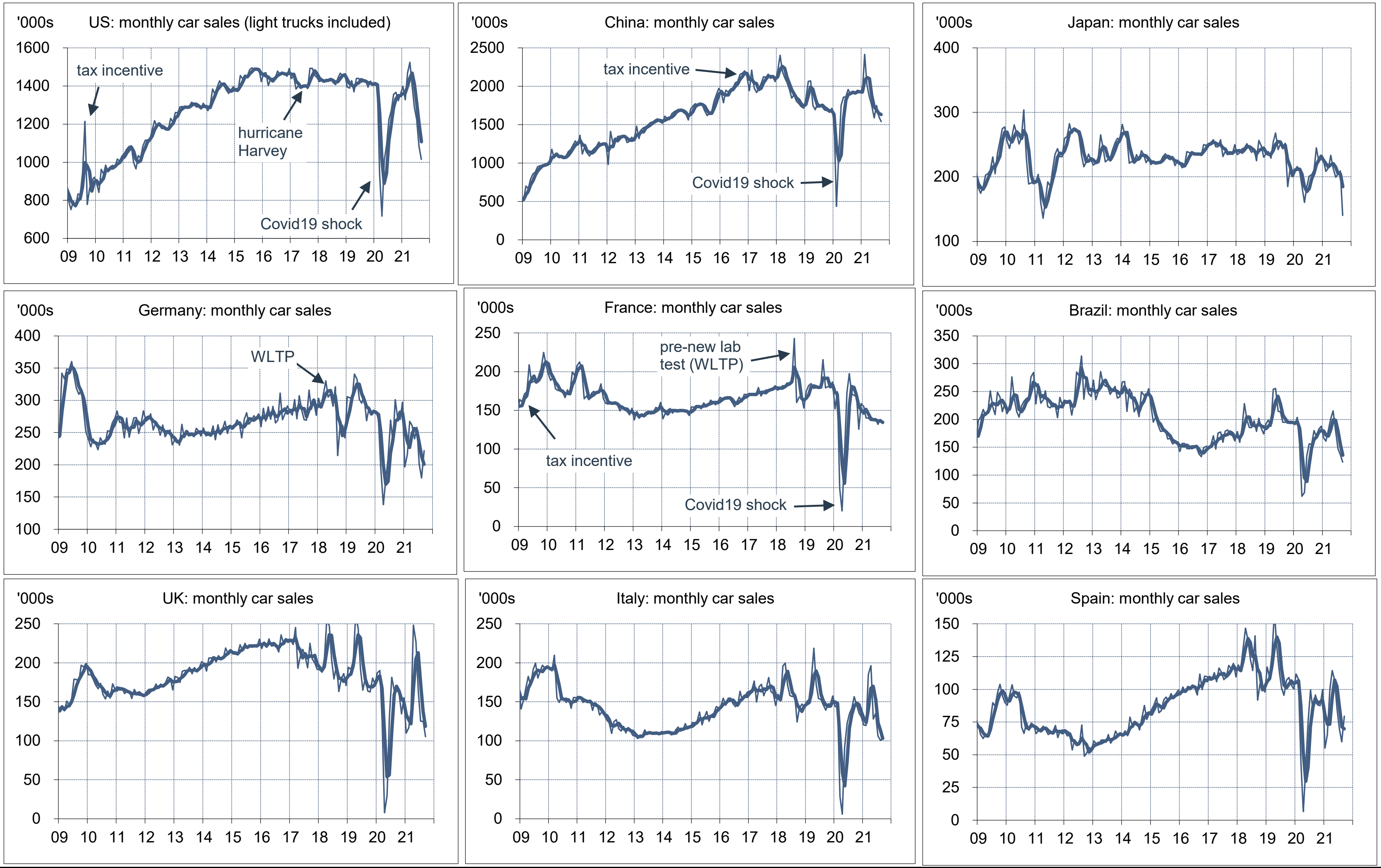






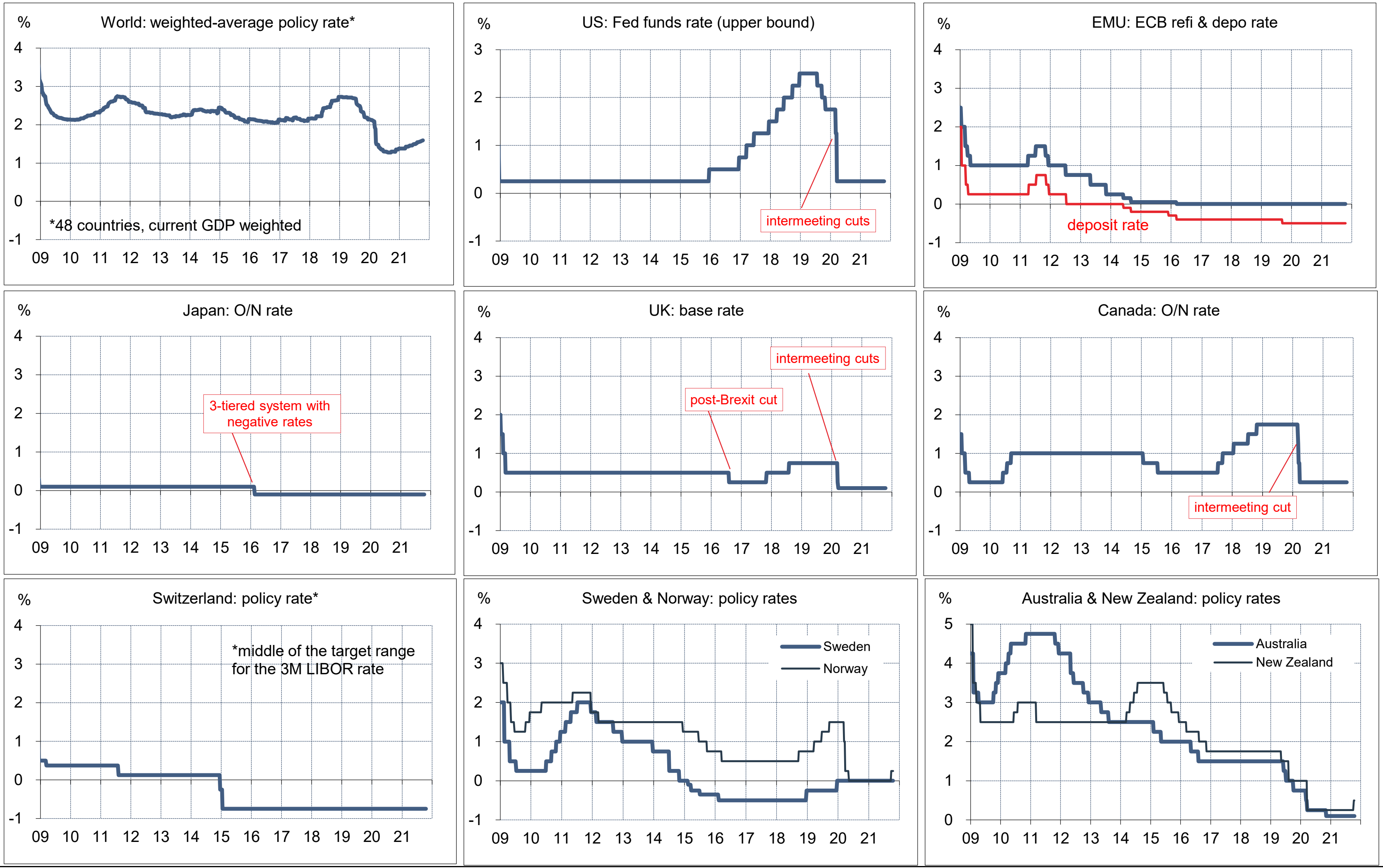
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 12: Car sales: G7 countries + China + Brazil



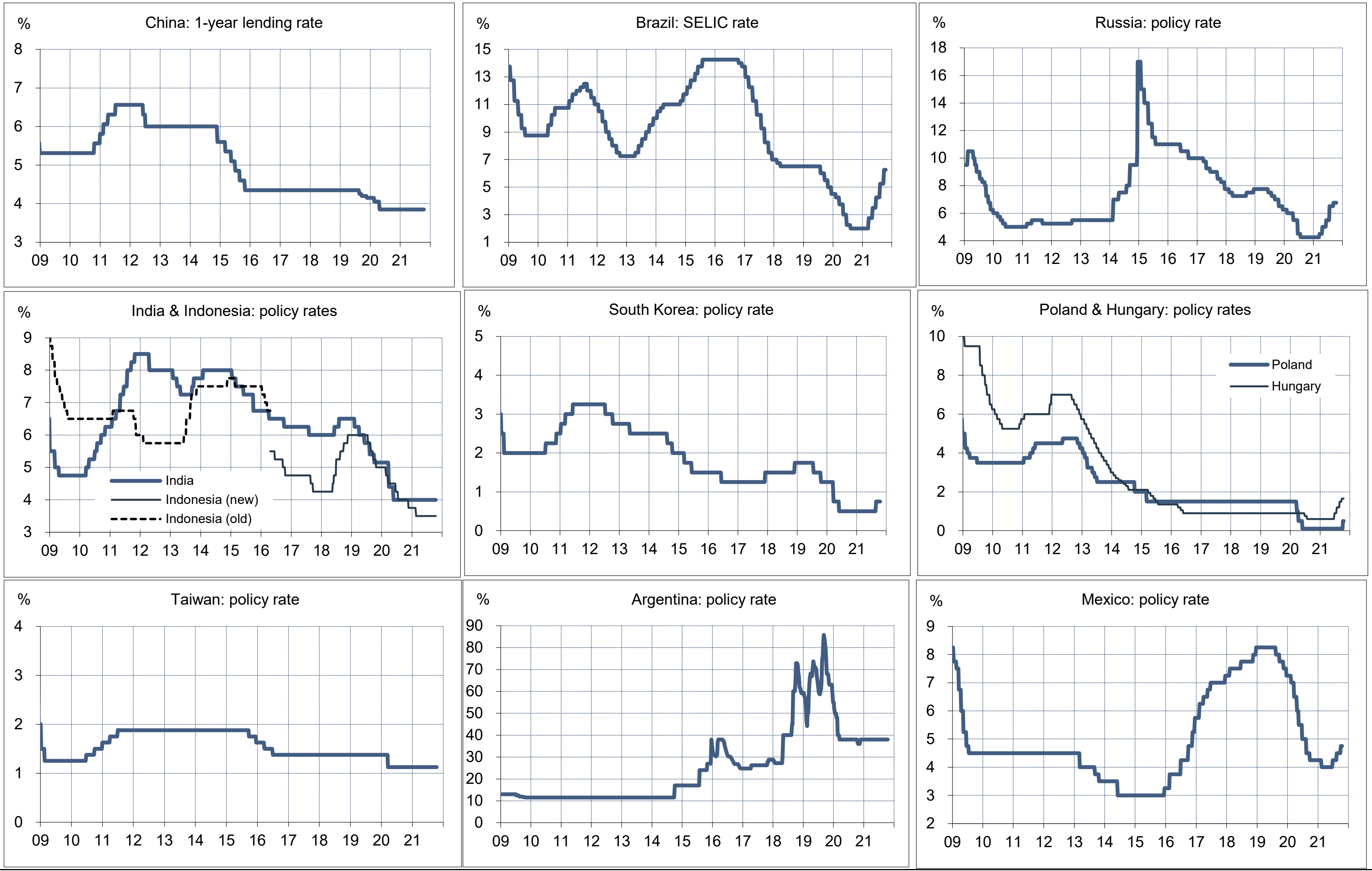
Sources: Thomson Reuters, ODDO BHF Securities

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



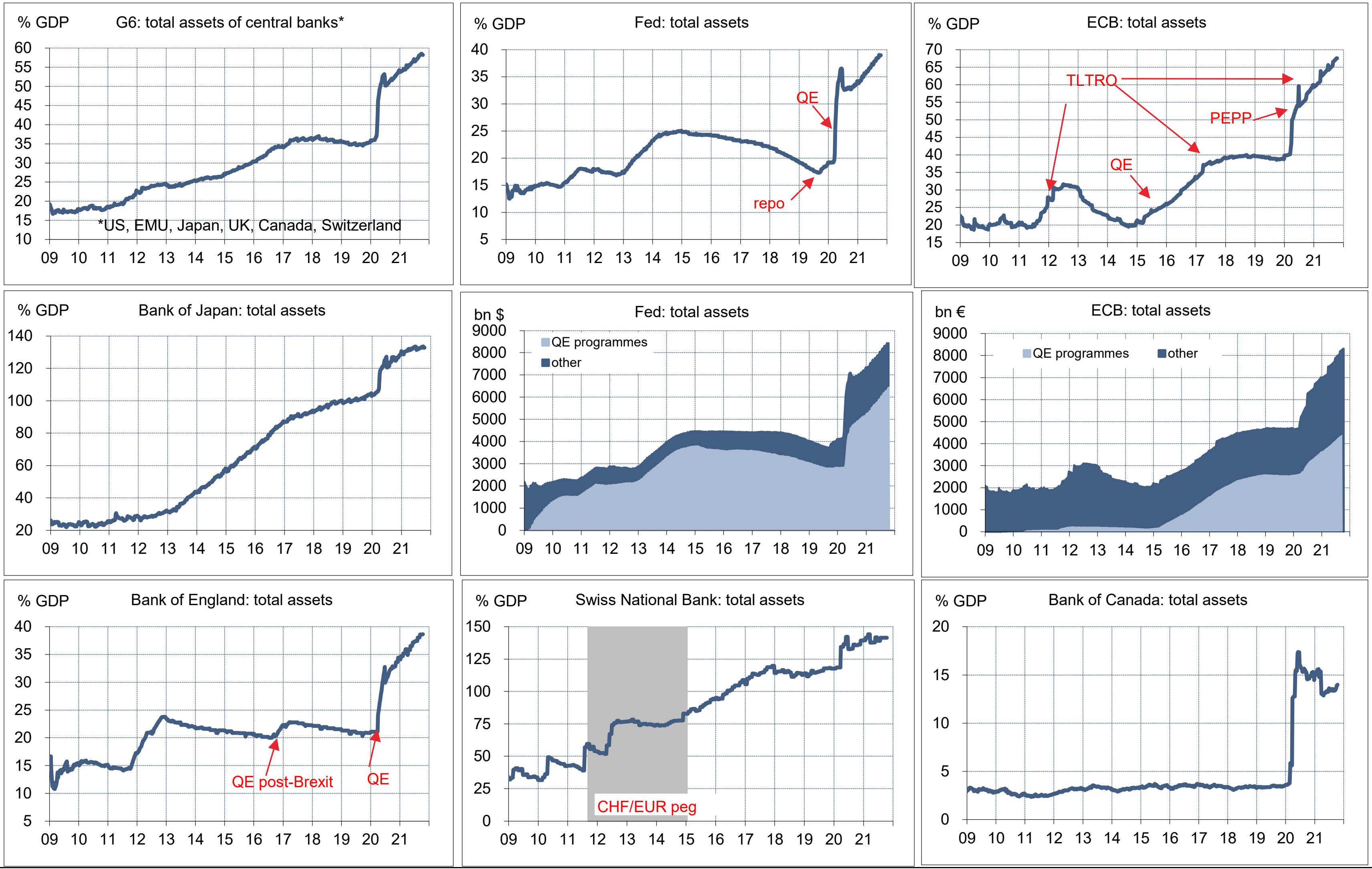
Sources: Thomson Reuters, ODDO BHF Securities

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



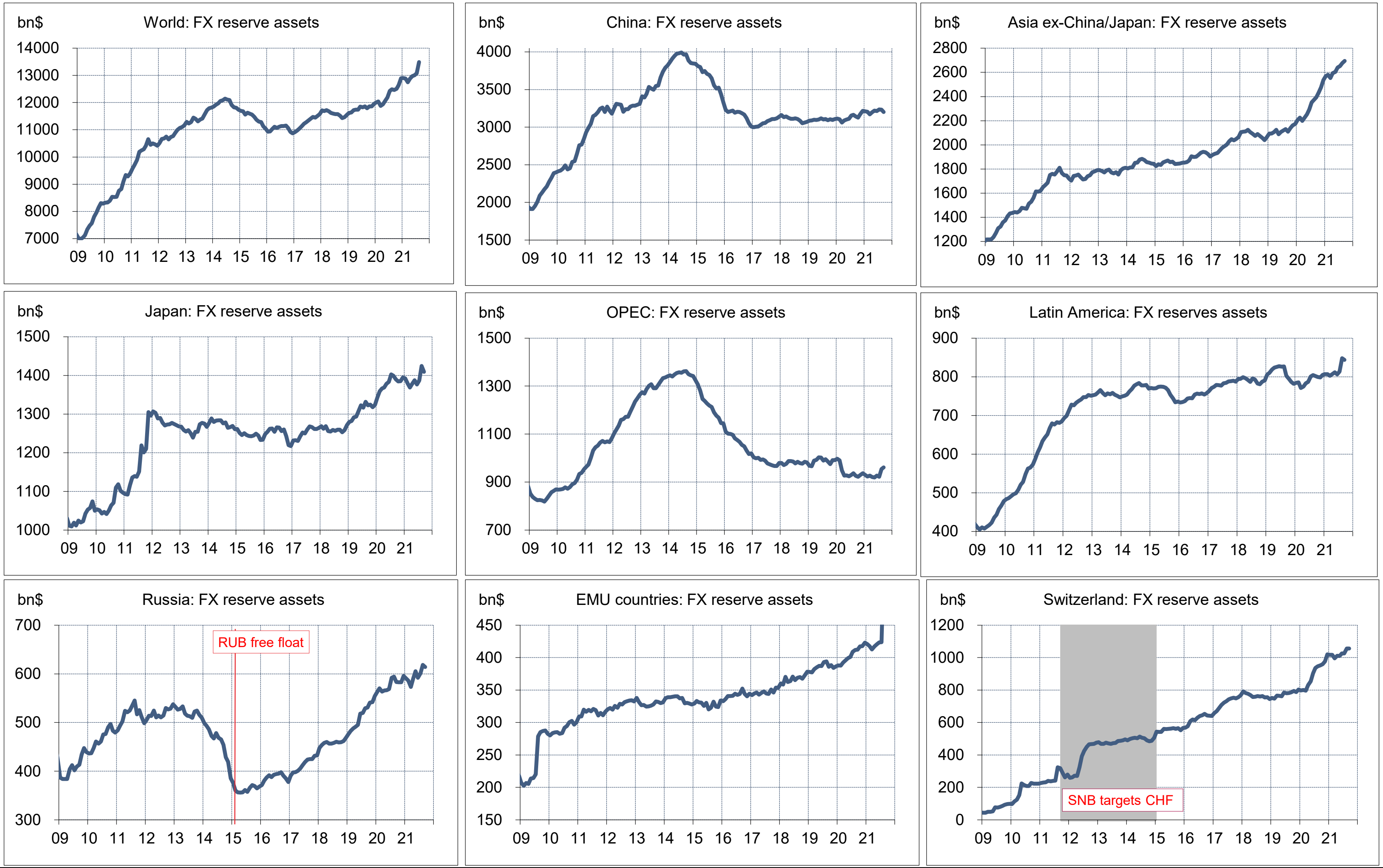
Sources: Thomson Reuters, ODDO BHF Securities

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



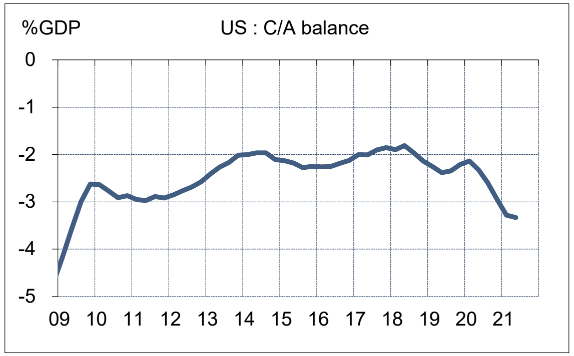
Sources: Thomson Reuters, ODDO BHF Securities

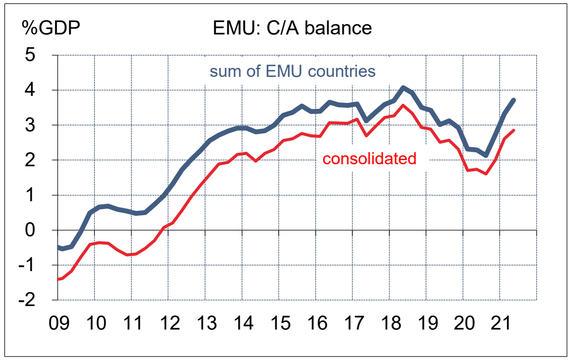
Appendix 16: Currency reserves (in US$): world and principal holders

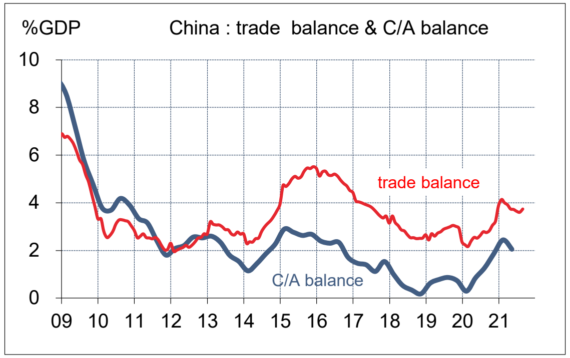


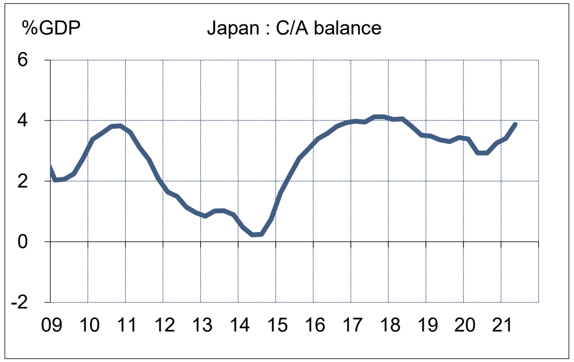
Sources: Thomson Reuters, ODDO BHF Securities

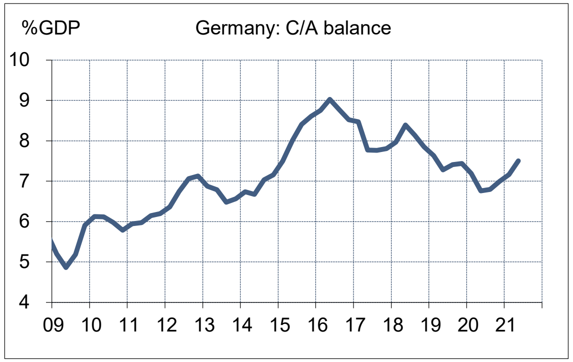
Appendix 17: Current account balances (% of GDP): G7 countries + China

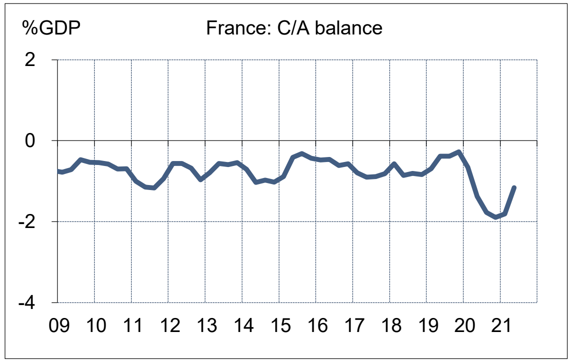


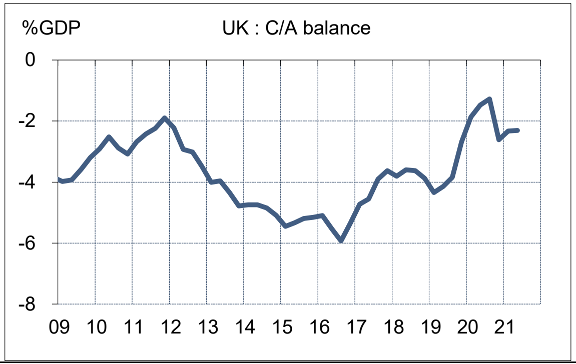


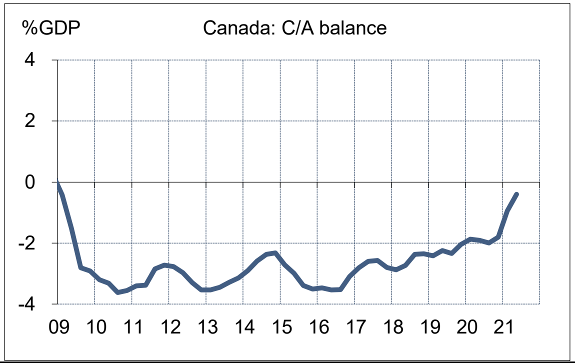


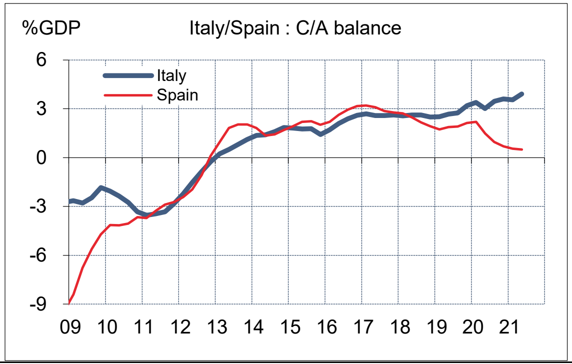






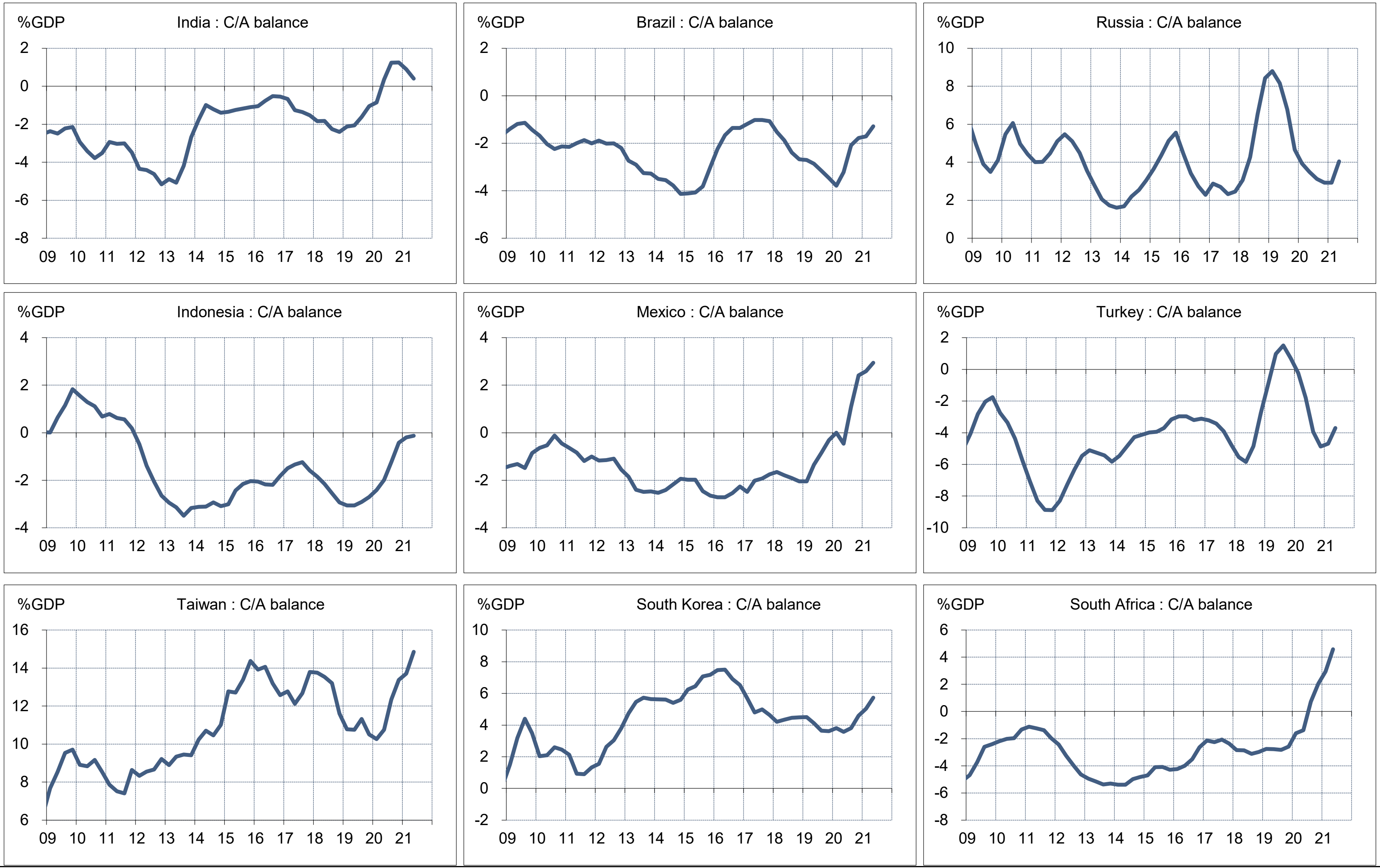






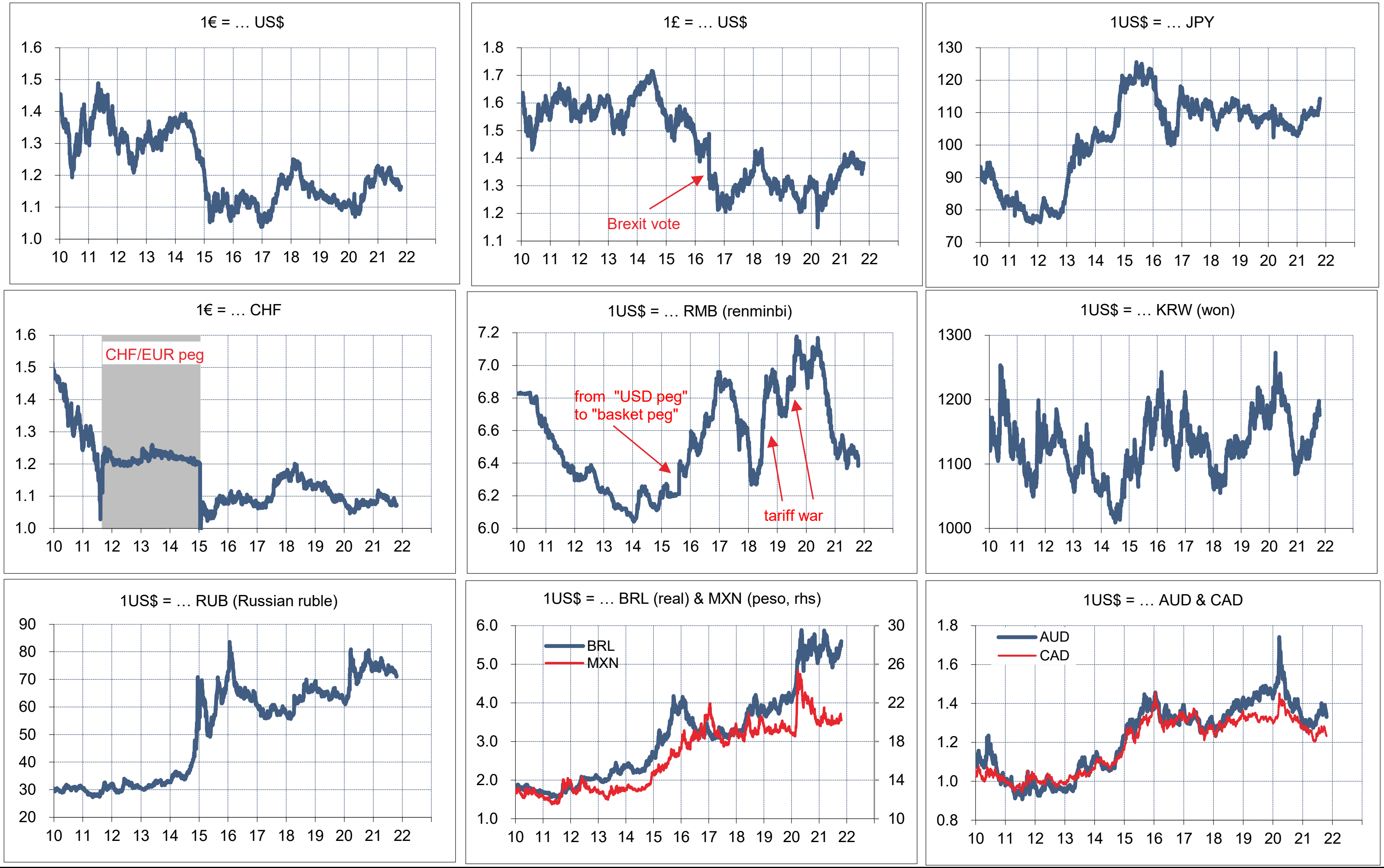
Sources: Thomson Reuters, ODDO BHF Securities

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



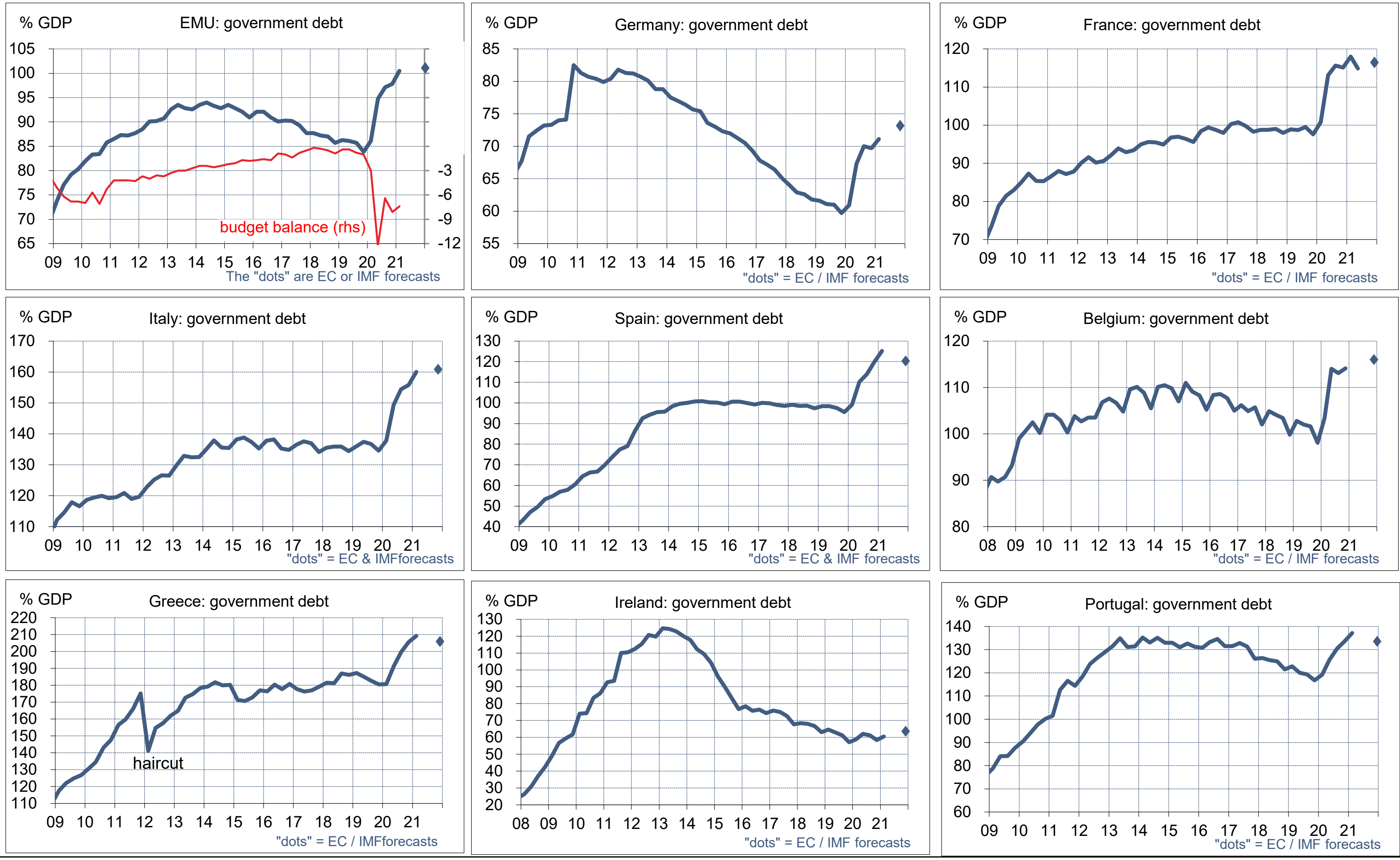
Sources: Thomson Reuters, ODDO BHF Securities

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



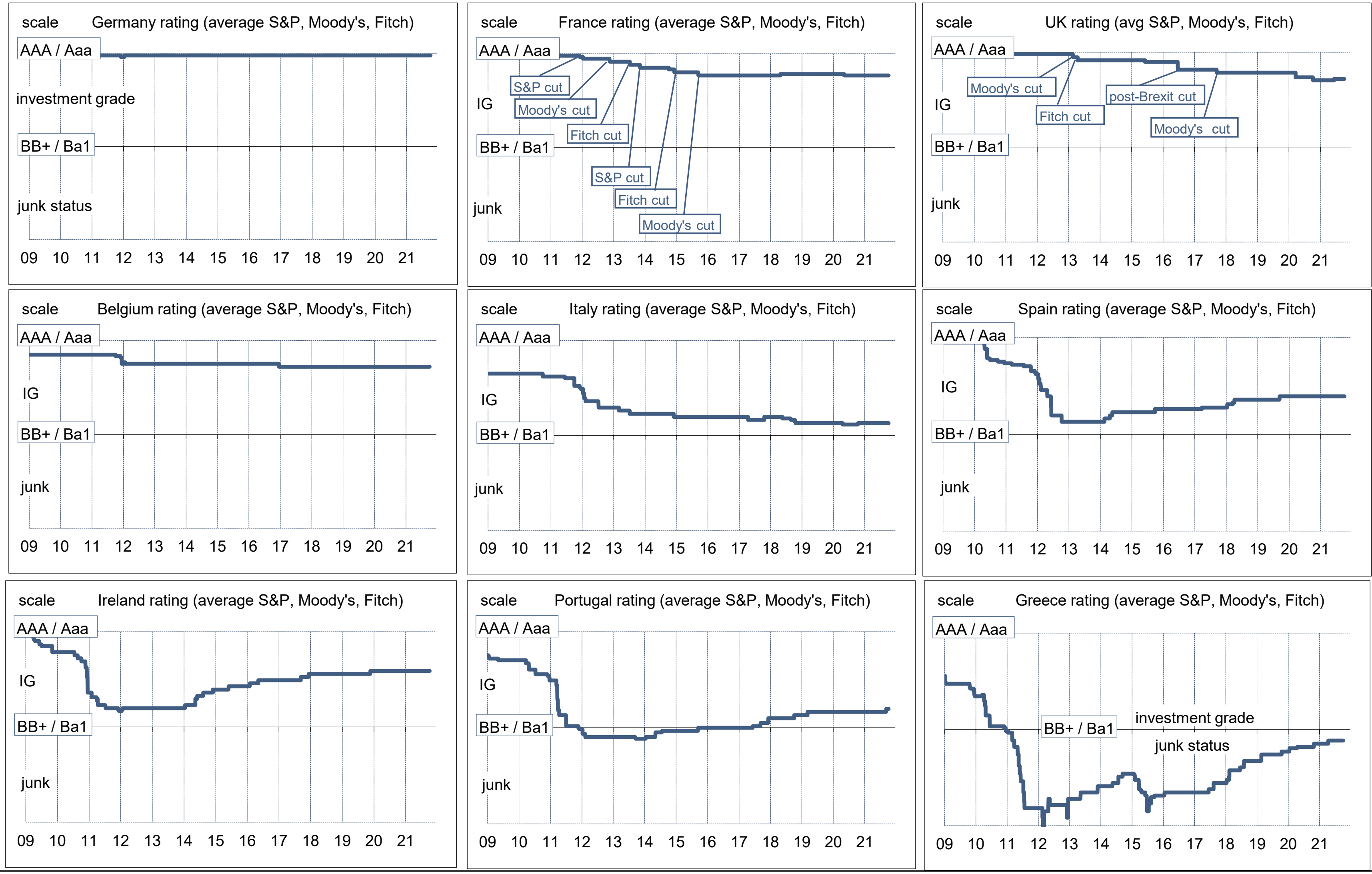
Sources: Thomson Reuters, ODDO BHF Securities

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



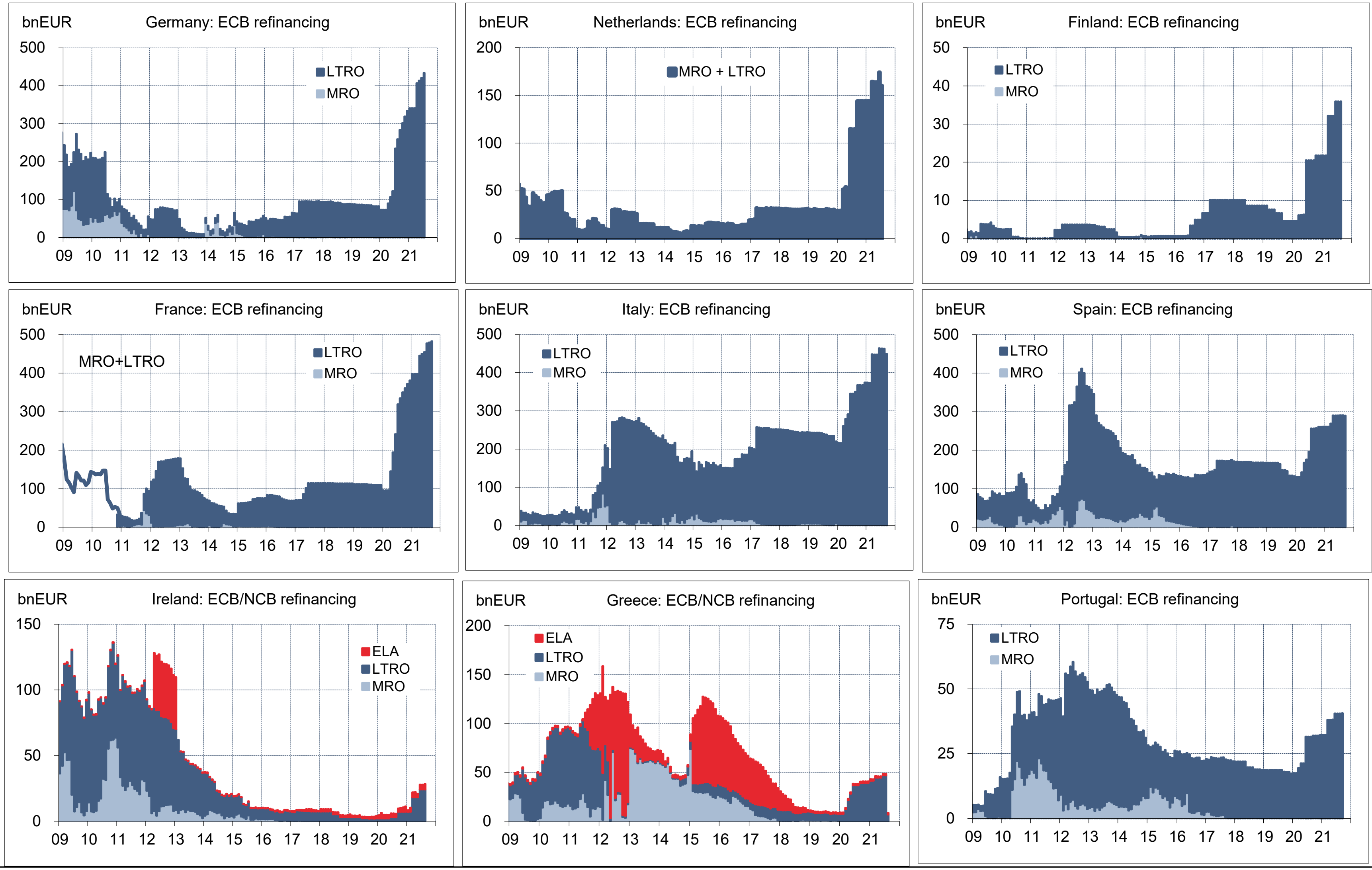
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 21: Sovereign ratings: European countries (selection)



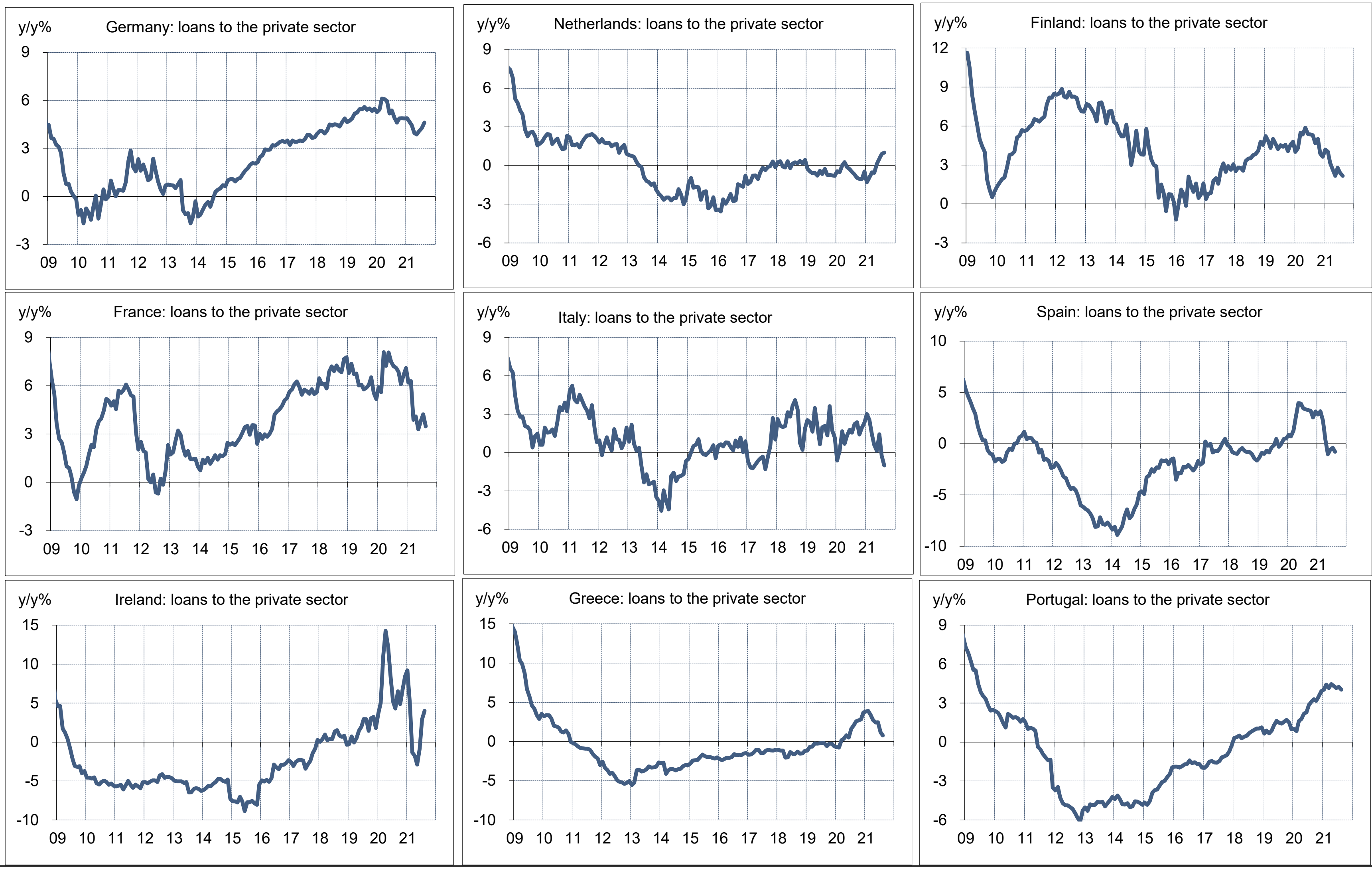
Sources: Thomson Reuters, ODDO BHF Securities

Appendix 22: Bank financing by the Eurosystem



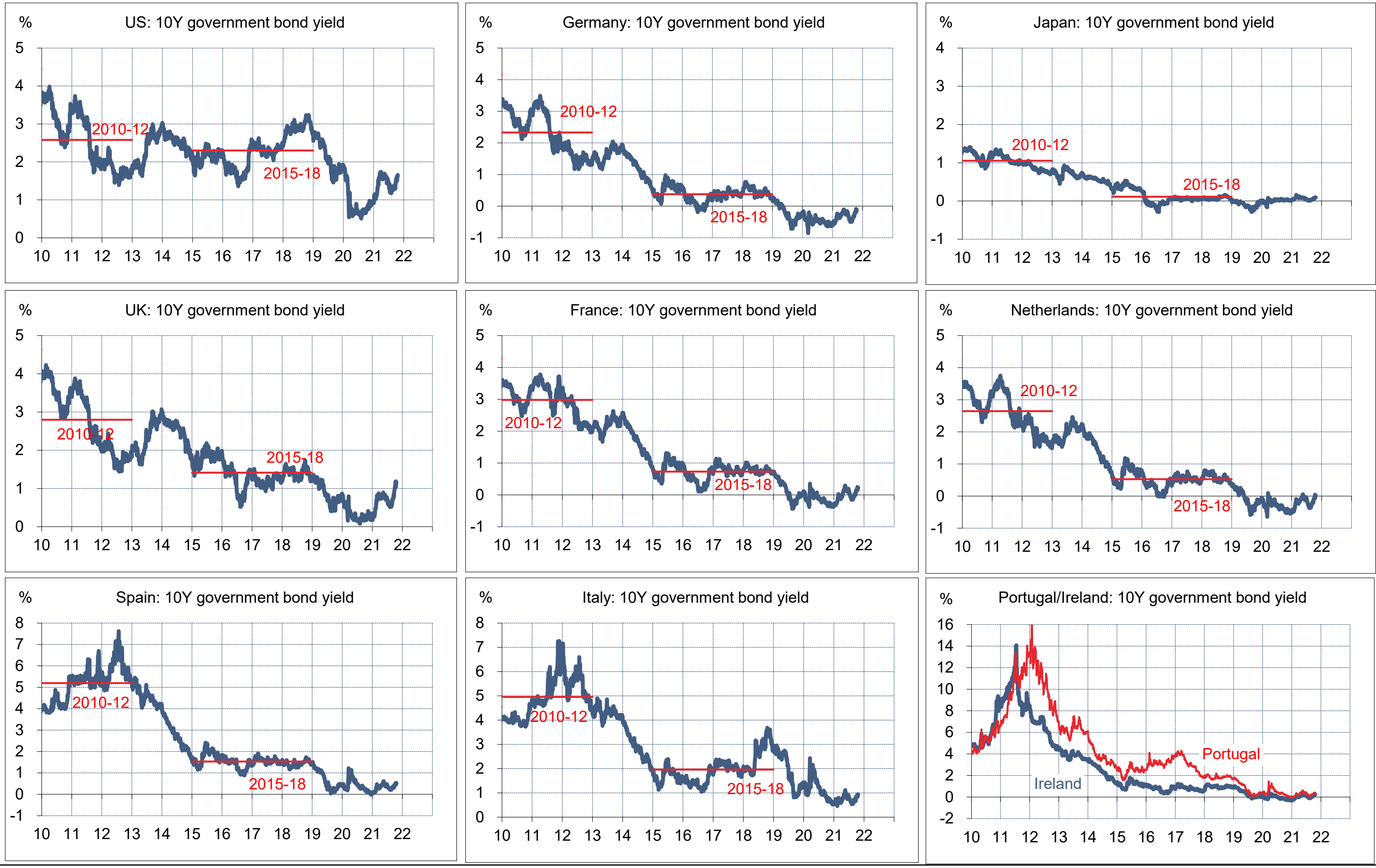
Sources: Thomson Reuters, ODDO BHF Securities

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



Sources: Thomson Reuters, ODDO BHF Securities

Appendix 24: 10-year government bond yield



Sources: Thomson Reuters, ODDO BHF Securities

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