Economy and Financial Markets

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Poland Economics View

A step closer to a lockdown

- Government has announced a new set of measures aiming to contain the spread of COVID-19. Although not a lockdown yet, the restrictions are harsh enough to have a meaningful impact on social distancing and economic activity.
- In the note we present estimates of the likely impact on 4Q GDP. In our view the economy is to contract by around 4% QoQ, after more than 8% increase in 3Q.
- Recession is likely to be shallower than in 2Q due to a number of reasons

 lower starting point, less severe restrictions and better preparation of businesses.
- Fiscal policy needs to respond. Just like in 2Q it seems to be the only efficient way to stabilize the economy.
- Monetary policy will have a supportive but important role. Asset purchases will be crucial to stabilize yields and ensure stable financing conditions for the budget. In this respect the asset purchase program looks more like the yield curve control rather than the narrowly defined QE.

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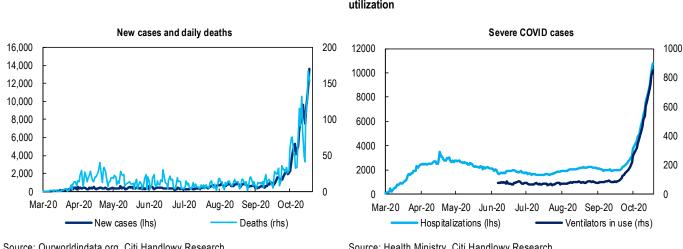
A step closer to lockdown

After an experience of the first pandemic wave, Polish authorities have been determined to avoid a repeat of a hard lockdown. Instead, the government preferred a policy of gradual introduction of regional or selective restrictions aiming to increase physical distancing without putting too much burden on the economy. However, as the number of confirmed COVID-19 cases has risen and the burden on the healthcare increased rapidly (Figures 1-2), the increasingly tighter restrictions were put in place. Over time, what begun as simple limits on the number of participants in weddings or public events, eventually turned into compulsory mask wearing, a complete ban on weddings, partial closure of secondary schools, shortening of restaurants' opening hours, (partial) closure of gyms, amusement parks and swimming pools.

The most recent decision, announced on October 23rd, goes even further. The government decided to close all restaurants and pubs for two weeks (only takeaway orders allowed), close elementary schools for grades 4th-8th and ban all activities for groups bigger than 5 people. The authorities also recommended - whenever possible - work from home and asked the elderly to stay inside. The extent of restrictions is much smaller than in case of the first COVID-19 wave but it is sufficiently far reaching to have meaningful impact on social distancing and economic activity

Figure 1. Sharp rise in new COVID-19 cases in October...

Figure 2. ... is accompanied by a sharp rise in healthcare's capacity utilization



Source: Ourworldindata.org, Citi Handlowy Research

Source: Health Ministry, Citi Handlowy Research

Unlike in the spring, when the lockdown and supply chain disruptions affected a large part of the economy, at this stage sectors covered by restrictions constitute a relatively small share of overall value added (2.1%). We estimate that one month of these restrictions could deduct 0.6 pp from GDP growth in 4Q, while keeping them in place until the end of the year would increase the 'cost' to almost 1 percentage point (see Figure 3). These are only static estimates that do not take into account potential feedback loops but they provide a useful benchmark for the size of the shock. As far as the decision to close elementary schools is concerned, its impact on economic activity will be softened by the fact that youngest students from first grades are allowed to continue learning onsite. This will reduce the negative impact of school closures on parents' ability to work. Reliable estimates for Poland are not available but for other countries it is estimated that a one month of school closure can deduct 0.3 pp from

GDP1. Therefore in our forecasts we assume that a month of restrictions in the current form (i.e. excluding youngest students) could probably reduce Poland's GDP by approx. 0.1 pp. Consequently, the extension of school closures to younger grades and kindergartens would imply higher costs.

Figure 3. Impact of selected pandemic restrictions on activity

			One month of res	trictions	Restrictions until the end of 4Q			
	Assumed decline in Weight of the subsector Value Added in Value Added (%)		Assumed duration of the shock (as a fraction of the quarter)	Impact on GDP	P Assumed duration of Impact on G the shock (as a fraction of the quarter)			
	Α	В	С	D=A*B*C	E	F=A*B*E		
Accommodation and food service	-80%	1.32%	0.33	-0.3%	0.8	-0.8%		
Entertainment, arts	-100%	0.47%	0.33	-0.2%	0.8	-0.4%		
Sports activities, amusement, recreation	-100%	0.29%	0.33	-0.1%	0.8	-0.2%		
Total		2.09%		-0.6%		-1.46%		

Source: Citi Handlowy Research estimates based on Eurostat data

In this context an important question is how long the restrictions are likely to stay in place and whether more restrictions are on the way. Restaurants are to be closed for at least two weeks but government has not given any timeline for other restrictions, which suggests that a return to 'normal' will take place when the situation in the health care system improves (falling numbers of hospitalizations and ventilators used). Since the announced anti-pandemic measures are relatively mild and their impact on pandemic trends is likely to be gradual, we think restrictions may remain in place for long.

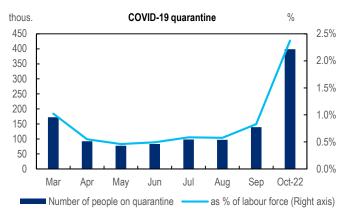
For the sake of our forecasts we assume they will not be removed until the end of quarter. As far as risks are concerned, we think it cannot be ruled out that the Polish authorities can eventually introduce a mini-lockdown, including closing of non-essential businesses and schools for youngest grades (but possibly for a limited and specified period of time, shorter than in spring). Such a step would be possible if the spread of the virus overwhelmed the healthcare system. It seems the authorities would like to avoid that scenario. However, if lessons from other countries (in particular from the Czech Republic) are of any use, it is clear that when a burden on healthcare systems is high, the actual pandemic trends may force even unwanted decisions.

The overall impact of the second pandemic wave on the economy goes well beyond the direct impact of announced restrictions. Therefore the economic cost in terms of GDP is likely to be higher than the above estimates suggest. As of October 22nd the number of people in quarantine reached 399 thousand, equivalent to 2.4% of the labour force (Figure 4). Data on age structure of those in quarantine are not available, but we assume that at least half of them are in a working age group. Since an infection of one employee can imply that a number of co-workers could be covered by the quarantine, this creates a potential for more-than-proportional impact on economic activity (as certain firms may temporarily face significant reductions in active labour force). We estimate that 1%

¹ Lempel, Hammond, Epstein (2009) "Costs of school closure", Economic Studies Program, The Brookings Institution

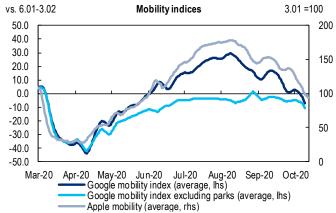
reduction in labour force due to quarantine, if maintained for one full quarter, could reduce GDP growth by ~0.7 pp.

Figure 4. Spread of COVID-19 is affecting an increasing share of the labour market



Source: Health Ministry, GUS, Citi Handlowy Research

Figure 5. Social mobility declined sharply after the summer but detailed breakdown suggests this is mainly due to lower activity outside (parks, forests)



Source: Google, Apple, Citi Handlowy Research

The fear of getting infected may be a powerful factor leading to social distancing even in the case of light restrictions. The data on social mobility published by Google and Apple suggest the social distancing started already before the government took action (Figure 5). This observation is consistent with significantly lower traffic of passenger cars in recent weeks (Figure 7). Also consumer confidence data collected by the GUS before the most recent acceleration in confirmed COVID-19 cases shows that households are reacting to pandemic trends, which is likely to result in weaker consumption in 4Q. This phenomenon should be also analyzed in the context of a likely weakening in activity in other European countries. Our colleagues have downgraded their forecasts for Eurozone GDP by 0.6 pp in 2020 and by 1.2 pp in 2021 and we think it is likely to be reflected in weaker demand for Polish exports as well. Since this time, unlike in early 2020, there are no signs of substantial supply chain disruptions we expect lower demand in the euro zone will have more significant impact on exports of consumer goods rather than capital goods.

Less painful than 2Q but still significant

All in all, taking into account the above-mentioned factors we estimate GDP is likely to contract by around 3.5-4.5% QoQ in the final quarter of 2020. This is our base case and risks to this forecast are skewed to the downside as additional restrictions or even a quasi-lockdown cannot be ruled out. In a downside scenario of a six week lockdown we think the contraction could reach ~6-7% QoQ (vs. 9% drop in 2Q20, during the first COVID-wave). There are several reasons why we expect recession to be smaller than in 2Q. First, certain industries (for example entertainment, arts) already operate significantly below their pre-pandemic levels. Second, other industries (manufacturing) adjusted procedures and working conditions in order to minimize infection risks which allows them to continue operations. Third, the pandemic is not new anymore and therefore

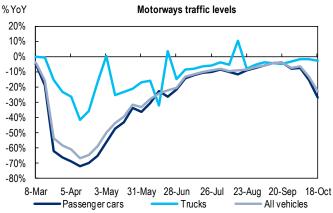
a risk of large cuts in investment is smaller now. Fourth, the severity of restrictions is simply smaller than in case of the first lockdown.

While assessing the impact on full year growth it is important to emphasize that the July-September activity data, which covers the period preceding the second wave, surprised to the upside. The data suggests that GDP in 3Q grew by $\sim 8\%$ QoQ, significantly more than 6.7% we had expected . Therefore even though we are more pessimistic about 4Q we revised full year growth only moderately - we now expect 2020 GDP to contract by 3.5% (vs. 3.1% before the revision).

More significant revisions are likely in 2021. The lower starting point and a slower recovery in 1Q suggest that next year's GDP growth can reach 3.7% and be by around 1 percentage point lower than previously expected. We now estimate the GDP will reach 4Q19 level only in 4Q21 but the gap towards pre-pandemic trend will remain wide. According to our estimates even by the end of 2021 the real GDP will by almost 7% lower than the level implied by the trend (Figure 8).

Figure 6. Poland - selected macroeconomic forecasts 2020 2021 2022 GDP growth (YoY) -3.5 3.7 3.7 Private consumption (YoY) -3.3 3.6 4.9 Fixed investment (YoY) -87 1.6 5.0 CPI (%, average) 3.5 2.1 2.4 Unemployment rate (%, eop) 6.9 7 6.3 General government deficit (% of GDP) -11.3 -5.7 -4.5 NBP reference rate (% eop) 0.1 0.1 0.5 Source: GS, NBP, Eurostat, Citi Handlowy Research

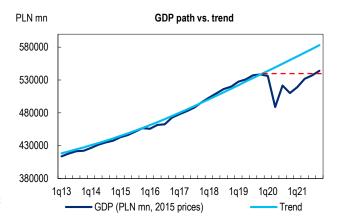
Figure 7. Less traffic in cities and on motorways mainly due to passenger cars



Source: Stalexport, Citi Handlowy Research, *congestion on part of A4

motorway managed by Stalexport

Figure 8. GDP will return to pre pandemic levels only by the end of 2021



Source: CSO, Citi Handlowy Research

Monetary and fiscal policy implications

Policy response to the first pandemic wave was large and surprising. Due to increased fiscal spending and liquidity measures for companies the general government deficit was boosted by more than 10% of GDP as compared to 2019. Also the central bank surprised by cutting rates to almost zero and starting the asset purchase program which led to an increase in NBP balance sheet by 5% of GDP (reflected in domestic assets – see Figure 8). These decisions were instrumental in smoothing GDP path and stabilizing the labour market. However, it seems the response in face of the second pandemic wave is likely to be smaller.

Choosing among fiscal and monetary policy tools, we think the fiscal easing is a more adequate response to the pandemic-related shock. Fiscal programs can provide liquidity to affected firms or can limit the extent of layoffs, something the monetary policy cannot achieve directly. Taking this into account we expect the fiscal policy to remain the key source of support for the economy in the coming quarters, thus keeping both deficit and debt level high in 2021. Yet the present response will probably differ from 2Q as this time the authorities seem to prefer smaller but better targeted programs. One of the reasons for that more cautious approach is the 60% of GDP debt limit enshrined in the constitution. Already now the public debt calculated according to Polish methodology is expected to exceed 50% of GDP in 2020. Even if no fiscal stimulus is provided, the debt may rise further due to a mix of cyclically lower revenues and lower nominal GDP. Therefore, we expect that in the first stage the government will probably try to redirect some of already approved but unused funds from the financial and anti-pandemic shields, which are estimated at around PLN 50 bn (or ~2% of GDP). The impact of these funds is already included in our fiscal forecasts. The government may also again plan the fiscal stimulus in a way that goes through off-budget funds and therefore bypasses the public sector (as defined in public finance law). All in all we expect the fiscal deficit to reach almost 6% of GDP in 2021 (Figure 6) and we see risks clearly skewed towards a higher shortfall. However, since the economic shock appears smaller than in 1H20 and the fiscal response is likely to be better targeted, the overall size of the deficit will be significantly lower than 11-12% in 2020.

Figure 9. NBP asset purchase program (SOMO) led to a rise in central bank's domestic assets by 5% of GDP

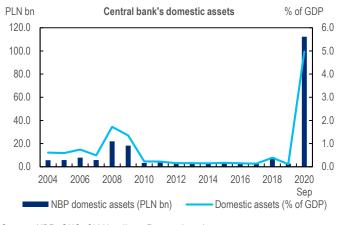
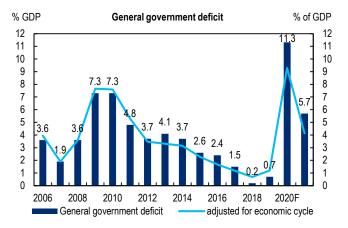


Figure 10. General government deficit likely to stay elevated in 2021 as fiscal policy will be used to counteract pandemic-related shock



Source: NBP, GUS, Citi Handlowy Research estimates

Source: Eurostat, Citi Handlowy Research estimates

As far as monetary policy is concerned, the base rate already hit 0.1% in 2Q20 and the deposit rate reached 0%. While a further rate reduction to the negative territory cannot be entirely ruled out, in our view such a move

would not change much. First, the room for any reductions would be very limited anyway. Furthermore, in the current environment the demand for loans remains low and cutting rates would not change much in this respect but it could create financial stability risks. Therefore our base case remains unchanged and assumes stable rates in the coming quarters, at least until mid-2022.

In recent months the Monetary Policy Council repeatedly signaled in its statements that it would welcome PLN depreciation. These efforts seemed to have limited impact on the market and the zloty remained relatively stable, possibly due to large current account surplus. While we think the MPC will continue to try to talk the PLN down, we doubt this could change much in actual economic situation. External demand is not a serious constrain for the Polish economy at the moment and Poland is running a trade surplus anyway. The only potential consequence of substantially weaker currency would be a boost to an already-high inflation.

In our view the best way for monetary policy to support the economy is through the QE (or more precisely: Structural Open Market Operations - SOMO). When the NBP introduced the quantitative easing program in early 2020 it did not provide any limits on asset purchases so the scale of its operations can be easily increased. We think the size of bond purchases will be adjusted depending on market conditions and actual bond issuances. The main benefits of the NBP SOMO program is related to the fact that it stabilizes bond yields and provides a comfortable financing conditions for the budget, regardless of the size of the fiscal deficit. This is possible thanks to the flexibility of the program and especially the lack of any limits on asset purchases. From this point of view the asset purchase program in Poland has more in common with yield curve control rather than narrowly defined Quantitative Easing

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Appendix

Figure 11. Poland – selected macroeconomic indicators (base case and illustrative alternative scenarios)

	Base case			Negative scenario		Sharp recession scenario				
	2020F	2021F	2022F	2023F	2020F	2021	2020F	2021F	2022F	2023F
Macro Indicators										
Real GDP Growth (%)	-3.5	3.7	3.7	3.3	-4.1	1.5	-5.2	-2.8	3.0	1.9
Private consumption % YoY	-3.3	4.9	3.6	3.0	-3.8	1.9	-5.0	-2.3	2.0	1.8
Consumer Prices (% chg; period avg)	3.5	2.1	2.4	2.6	3.4	1.6	3.3	0.7	0.5	1.0
Consumer Prices (% chg; end-period)	2.8	2.1	2.6	2.6	2.5	1.3	2.3	0.2	0.7	1.2
Key Policy Interest Rate (%,avg) [NBP reference rate]	0.44	0.10	0.23	1.17	0.43	0.00	0.43	0.00	0.00	0.00
Key Policy Interest Rate (%,eop) [NBP reference rate]	0.10	0.10	0.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00
Lombard rate EOP %	0.50	0.50	1.00	2.50	0.50	0.50	0.50	0.50	0.50	0.50
Equity Market Index (level, eop) [WIG20]	1600	1856	2050	2227	1525	1594	1300	1297	1542	1704
Equity Market Index (level, eop) [WIG]	47000	52957	58000	63000	44000	46000	38000	37000	44000	48600
Unemployment Rate (%, EoP)	6.9	7.0	6.3	6.0	7.3	8.5	7.7	9.5	10.2	9.4
Nominal Wages in the corporate sector (% YoY) growth rate %	4.0	4.3	4.7	5.0	3.8	2.9	3.5	0.3	1.1	2.6
Oil Price - Brent (US\$/barrel) (avg)	44.0	57.0	59.0	57.0	40.0	48.5	38.0	39.9	41.3	39.9
Housing Price Index [NBP hedonic price index for 10 biggest cities, % YoY]	9.8	-1.7	1.8	3.0	8.8	-2.9	8.5	-7.0	-3.0	0.0
Fiscal Indicators										
Fiscal Balance / GDP (%)	-11.3	-5.7	-4.5	-3.9	-11.6	-6.5	-12.0	-8.3	-5.2	-4.8
General government debt / GDP (%)	61.3	64.3	63.9	64.1	63.1	69.9	64.0	78.6	78.0	78.0
External Indicators										
Exchange Rate (US\$, period avg)	3.91	3.64	3.48	3.35	3.97	4.30	4.00	4.90	4.60	4.25
Exchange Rate (US\$, end-period)	3.81	3.54	3.41	3.32	4.25	4.20	4.45	4.90	4.40	4.10

Source: GUS, Eurostat, NBP, Reuters, Citi Handlowy Research estimates. Note: Negative scenario assumes a six week lockdown in 4Q followed by a slow recovery. A sharp recession scenario is an illustrative (low probability) scenario based on an assumption of a full lockdown in 4Q20 (partially extending into 1Q21) and inadequate fiscal support. In a such a scenario the damage to the economy could be permanent, lowering the potential growth in the following years.

Figure 12. Poland – selected market forecasts (base case and illustrative alternative scenarios)

	Base case				Negative scenario		Sharp recession scenario			
	2020F	2021F	2022F	2023F	2020F	2021	2020F	2021F	2022F	2023F
WIBOR TN (avg)	0.44	0.10	0.23	1.17	0.44	0.00	0.44	0.00	0.00	0.00
WIBOR 1M (avg)	0.56	0.20	0.40	1.39	0.58	0.10	0.54	0.15	0.15	0.15
WIBOR 3M (avg)	0.60	0.22	0.53	1.51	0.62	0.12	0.58	0.18	0.18	0.18
WIBOR 6M (avg)	0.63	0.26	0.74	1.65	0.65	0.15	0.61	0.21	0.21	0.23
WIBOR 12M (avg)	0.66	0.33	1.01	1.77	0.68	0.23	0.64	0.28	0.28	0.33
Yields of 2-year bonds (avg)	0.49	0.15	0.58	1.28	0.49	0.35	0.55	1.16	0.86	0.70
Yields of 3-year bonds (avg)	0.65	0.23	0.70	1.36	0.66	0.97	0.71	1.80	1.10	1.00
Yields of 5-year bonds (avg)	0.97	0.60	1.07	1.61	1.09	1.35	1.12	3.05	1.90	1.50
Yields of 10-year bonds (avg)	1.51	1.40	1.68	1.90	1.55	2.25	1.57	4.00	2.95	2.25
FX PLN/EUR (avg)	4.44	4.41	4.32	4.29	4.48	4.88	4.51	5.50	5.22	4.82
FX PLN/USD (avg)	3.91	3.64	3.48	3.35	3.97	4.30	4.00	4.90	4.65	4.29
FX PLN/CHF (avg)	4.15	4.00	3.78	3.63	4.19	4.56	4.22	5.20	4.88	4.26
EURIBOR 3M (avg)	-0.42	-0.49	-0.46	-0.45	-0.41	-0.60	-0.44	-1.00	-1.00	-0.60
LIBOR 3M CHF (avg)	-0.70	-0.75	-0.75	-0.73	-0.71	-0.80	-0.73	-1.23	-1.0	-1.0
LIBOR 3M USD (avg)	0.60	0.25	0.44	1.32	0.59	0.20	0.59	0.18	0.18	0.19
LIBOR 1M USD (avg)	0.48	0.15	0.31	1.22	0.48	0.14	0.47	0.14	0.14	0.14
Yields of 2-year swap (avg)	0.6	0.25	0.73	1.43	0.57	0.15	0.57	0.16	0.16	0.20
Yields of 3-year swap (avg)	0.65	0.28	0.75	1.41	0.63	0.17	0.62	0.20	0.20	0.30
Yields of 5-year swap (avg)	0.81	0.50	0.97	1.51	0.79	0.35	0.77	0.35	0.40	0.50
Yields of 10-year swap (avg)	1.1	1.00	1.30	1.55	1.07	0.75	1.04	0.60	0.75	0.85
2Y asset swap spread (avg)	-0.11	-0.10	-0.15	-0.15	-0.08	0.20	-0.02	1.00	0.70	0.50
3Y asset swap spread (avg)	0.00	-0.05	-0.05	-0.05	0.03	0.80	0.09	1.60	0.90	0.70
5Y asset swap spread (avg)	0.16	0.10	0.10	0.10	0.30	1.00	0.35	2.70	1.50	1.00
10Y asset swap spread (avg)	0.41	0.40	0.38	0.35	0.48	1.50	0.53	3.40	2.20	1.40

Source: GUS, Eurostat, NBP, Reuters, Citi Handlowy Research estimates. Note: Negative scenario assumes a six week lockdown in 4Q followed by a slow recovery. A sharp recession scenario is an illustrative (low probability) scenario based on an assumption of a full lockdown in 4Q20 (partially extending into 1Q21) and inadequate fiscal support. In a such a scenario the damage to the economy could be permanent, lowering the potential growth in the following

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