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Bankruptcies, unemployment and reallocation from Covid-19

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Bankruptcies, unemployment and reallocation from Covid-19

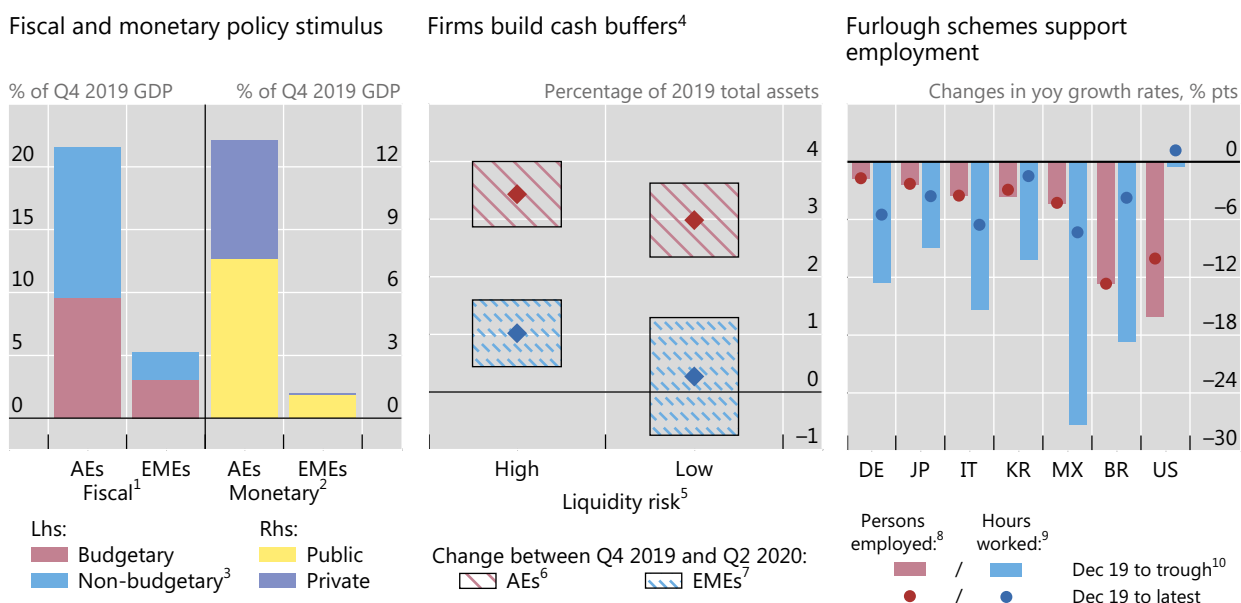
Key takeaways

- *The expected wave of business failures in the Covid-19 recession has yet to materialise, due in part to policy support, but also reflecting the inherent lag between declines in GDP and insolvencies.*
- *Bankruptcies weigh heavily on labour markets. Unemployment typically increases three times more if a fall in GDP is accompanied by a similar-sized increase in bankruptcies.*
- *Concentration of bankruptcies in those sectors hit especially hard by Covid-19 could exert a significant drag on the labour market.*
- *The natural renewal process where young, dynamic firms displace those who exited takes two to three years, leaving a protracted period of lacklustre activity. This underscores the need to reallocate resources quickly and efficiently to drive growth in the post-pandemic world.*

Unprecedented policy support has limited the impact of the sharp contraction in economic activity on households and firms. But pandemic-induced structural shifts are likely to induce significant sectoral reallocations accompanied by corporate failures and job losses. This underscores the need to reallocate resources quickly and efficiently to firms and sectors with better prospects in order to drive growth in the post-pandemic world. This Bulletin explores the link between bankruptcies, labour markets and the reallocation process.

Bankruptcies remain low amid lockdowns and massive policy support

Incidence of bankruptcies are low so far in 2020 (Banerjee et al (2020)). Massive fiscal and monetary support is likely to have subdued bankruptcies. Governments have undertaken significant non-budgetary measures to support the business sector via loan guarantees and direct equity injections in addition to budgetary fiscal stimulus (Graph 1, left-hand panel). At the same time, central banks have significantly expanded their balance sheets, including through purchases of private sector assets. Facilitated by favourable financing conditions, firms have raised large amounts of bridge financing to build cash buffers, especially those facing elevated liquidity risks (centre panel). In addition, wide-ranging furlough schemes have supported firms' balance sheets and unemployment. In many European economies employment held up even as the number of hours worked fell sharply (right-hand panel). Conversely, the absence of such schemes in the United States and emerging market economy (EME) labour markets has left a more obvious imprint on unemployment.



¹ Estimates focus on government discretionary measures that supplement existing automatic stabilisers, which differ across countries in their breadth and scope. AEs = AU, CA, DE, ES, FR, GB, IT, JP and US; EMEs = AR, BR, CN, ID, IN, KR, MX, RU, SA, TR and ZA. For regions, weighted averages based on GDP and PPP exchange rates. ² Purchases by sector. AEs = CA, EA, GB, JP and US; EMEs = CL, CO, HU, ID, IN, MY, PL, RO, TR and ZA. Changes since March 2020 to latest available data (15 Sep for ID; 16 Sep for PL; 18 Sep for IN; 30 Sep for CL; August for CO, HU, RO, MY, TR and ZA; July for IL). For regions, weighted averages based on GDP and PPP exchange rates. ³ Includes contingent liabilities and funding. Contingent liabilities include guarantees and quasi-fiscal operations, ie non-commercial activity of state-owned corporations on behalf of the government. ⁴ Mean change (dot) and 95% confidence interval (box) between Q4 2019 and Q2 2020, as a share of 2019 assets. Sample of non-financial firms reporting data for Q2 2020 financial statements. ⁵ High (low) firms have above (below) median short-term debt service-to-cash in Q4 2019. ⁶ AU, CA, DE, ES, FR, GB, IT, JP and US. ⁷ AR, BR, CN, ID, IN, MX, RU, SA, TR and ZA. ⁸ For MX, manufacturing. ⁹ Hours worked per employee. For BR, DE and MX, manufacturing; for JP, five or more employees; for US, private non-farm. ¹⁰ For persons employed, July 2020 for DE, JP, KR and US; June 2020 otherwise. For hours worked, July 2020 for KR and US; June 2020 otherwise.

Sources: IMF, *Fiscal Monitor*, April 2020 and update June 2020; American Bankruptcy Institute; Datastream; S&P Capital IQ; national data; authors' calculations.

The coming wave of bankruptcies and unemployment?

Despite the limited increase in bankruptcies in a number of economies, it may be just a matter of time, given the shock's size, before bankruptcies and, where it has not done so already, unemployment increase. In particular, bankruptcies and unemployment could spike once authorities start withdrawing support.

Irrespective of policy support, bankruptcies and unemployment have historically lagged GDP. They peak around one year after the initial GDP shock and remain elevated for at least another two (Graph 2, first panel). Banerjee et al (2020) predict that bankruptcies in advanced economies (AEs) could rise from the baseline in 2019 by around 20% in 2021. In addition, bankruptcies and unemployment could reinforce each other. For instance, during the Great Financial Crisis (GFC) of 2007–09, job destruction due to firms' exits amounted to about 10% of the unemployed in a sample of AEs.¹ More generally, bankruptcies raise unemployment over and above the impact of GDP. In AEs, unemployment typically increases by about 0.4 percentage points two years after a one standard deviation drop in GDP growth. But the increase can be up to three times, or 1.2 percentage points, greater when the drop coincides with an increase in bankruptcies of a similar relative magnitude (second panel).

¹ Available data for a few central and eastern European countries show that employment in firms that exited in 2009 was equivalent to about a quarter of the number of persons unemployed.

Pressure points in the financial sector could amplify the strains on corporates. Loan impairment charges at major banks, notably systemically important ones, surged in anticipation of a major deterioration in credit quality in the first two quarters of 2020 and now exceed 8% of their equity (Graph 2, third panel). Even though banks entered the Covid-19 crisis with notably higher levels of loss-absorbing capital than during past crises,² equity valuations appear to cast doubt on a swift recovery in banks' franchise values (fourth panel). Pressure on banks to scale down lending and tighten funding conditions, particularly for the more risky borrowers, has thus increased and could impinge on firms' ability to access bank credit. As lending support measures are eventually phased out, not least government loan guarantees, tight access to both bank credit and market-based funding could undermine firms' ability to roll over their debts. At the same time, fear of further deteriorations in credit quality amid weak prospects for revenues could keep banks from writing off troubled loans and cleaning up their balance sheet, hampering the reallocation of funds to new borrowers.

Just a matter of time before bankruptcies and unemployment soar?

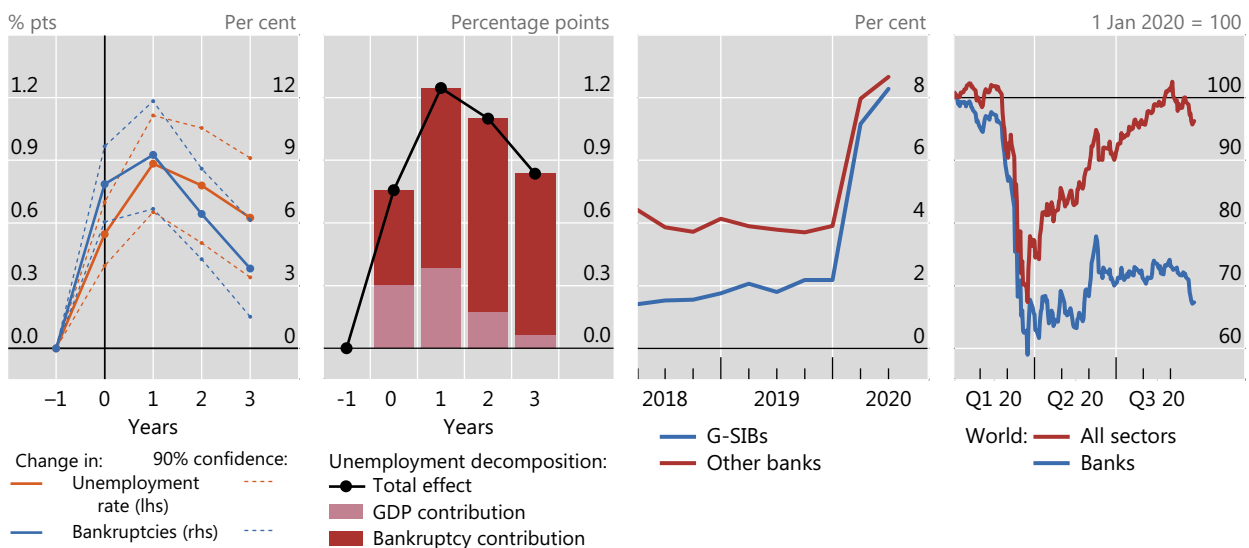
Graph 2

Slumps drive bankruptcies and unemployment up¹

Bankruptcies push unemployment up beyond fall in GDP²

Loan impairment charges weigh on banks' equity³

Banks struggle to recover loss in franchise value⁴



¹ Percentage point change in unemployment (percentage change in bankruptcies) following a one standard deviation drop in GDP. The sample comprises AU, BE, BR, CA, CH, DE, DK, ES, FI, FR, GB, IS, IT, JP, NL, NO, NZ, SE, US and ZA. Estimations include country dummies. ² Change in unemployment rate following a one standard deviation drop in GDP and a one standard deviation increase in bankruptcies. The sample comprises AU, BE, BR, CA, CH, DE, DK, ES, FI, FR, GB, IS, IT, JP, NL, NO, NZ, SE, US and ZA. Estimation includes country dummies. ³ Major banks' loan impairment charges as a percentage share of common equity; quarterly averages, weighted by total assets. ⁴ Based on global equity indices.

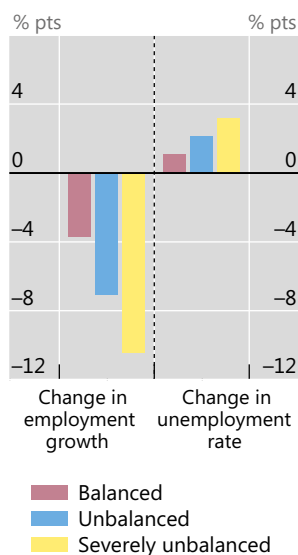
Sources: OECD, *Timely Indicators of Entrepreneurship and Economic Outlook*; Datastream; Moody's CreditEdge; SNL; authors' calculations.

Resource reallocation and the bankruptcy process

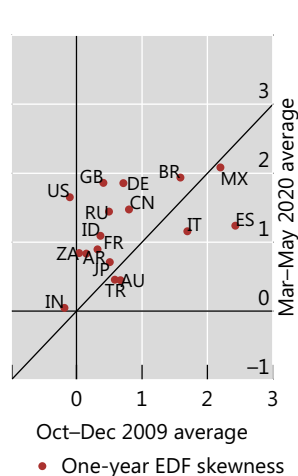
Bankruptcy processes and less formal restructuring mechanisms are important in reallocating resources. They are especially important in this recession given its widely differing impact across types of economic activity, and the consequent need for reallocation across sectors. That said, the macro impact and associated spillovers can leave a protracted period of lacklustre activity. Thus, the pace of resource allocation is crucial.

² See Lewrick et al (2020) for a discussion of bank capital buffers and the potential impact of the crisis on bank capitalisation.

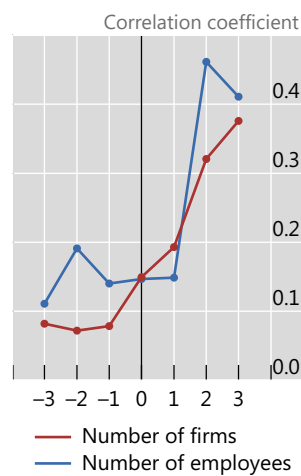
Unbalanced recessions weigh on labour markets¹



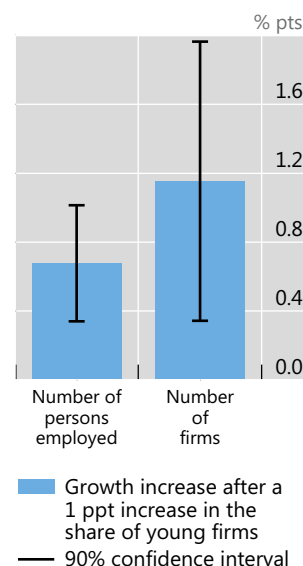
Default risk more concentrated than in GFC²



Young firms' presence goes up after rise in exits^{3, 4}



Higher share of young firms comes with stronger subsequent growth^{4, 5}



¹ Data from 2006–17 using AT, BE, CH, CZ, DE, ES, FI, FR, GB, IE, IT, NL, PL, PT, SE and TR. The red bars show the relative change in employment and the percentage change in the unemployment rate three years after a one standard deviation drop in growth and a one standard deviation increase in the employment share of exiting firms; the blue bars add to this scenario a two standard deviation increase in the dispersion of sectoral employment shares of exiting firms; and the yellow bars add another two standard deviation increase of the same dispersion. Estimations include country and time dummies. ² Country-level skewness computed using 11 sectors. The solid line represents the 45° gradient. ³ Correlation between sectoral exit rates and lagged or forward share of young firms (under five years old) in the population of firms (red line) or in total employment (blue line). The dots on the vertical line indicate the contemporaneous correlations. ⁴ Data on all non-farm business sector from 2006 to 2017 using AT, BE, CZ, DE, DK, ES, FI, FR, GB, HU, IE, IT, NL, NO, PL, PT and SE. ⁵ Increase in growth rate of number of persons employed (of number of firms) after a 1 percentage point increase in the share of young firms in total employment (in total number of firms). Estimations include country, sectors and time dummies.

Sources: OECD, *Business Demography Indicators* and *Economic Outlook*; World Bank, *Doing Business*; Moody's CreditEdge; authors' calculations.

The importance of reallocations can be assessed through the effect of recessions on the labour market. Unbalanced recessions – those where bankruptcies are particularly concentrated in specific sectors – tend to be deeper and longer, and leave an especially large imprint on the labour market, likely because of skill mismatches and sector-specific human capital (Graph 3, first panel). For instance, three years after a recession that hits all sectors equally (a so-called balanced recession), employment typically falls about 3.5 percentage points relative to the case of no recession. However, the drop in employment is almost three times larger (about 10 percentage points) following a severely unbalanced recession – one where output losses and bankruptcies are concentrated in specific sectors of the economy. Indeed, the Covid-19 recession is highly unbalanced: the skewness of sectoral expected default frequencies (EDFs), a measure of the sectoral concentration of risk, was on average twice as high in March–May 2020 as in Q4 2009 during the GFC (second panel).

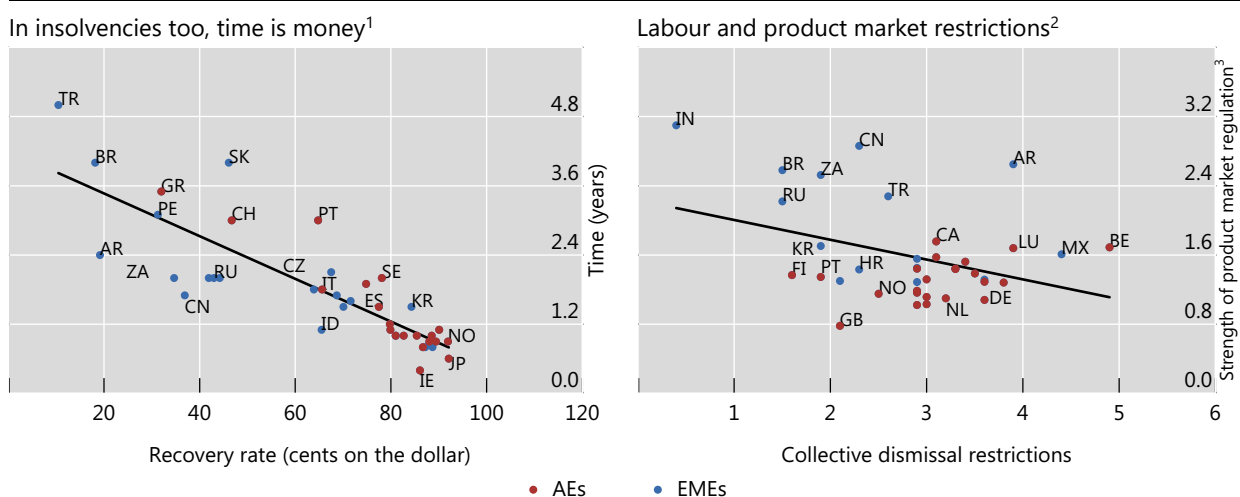
Still, bankruptcies can act as a catalyst for renewal. The key distinction here is between the short-run aggregate demand costs of layoffs and closures, on the one hand, and the renewal process where young, dynamic firms displace those that exited, on the other. Although there can still be significant time lags, young and typically more dynamic firms generally account for a larger fraction of all firms and of

employment two to three years after an increase in exits (Graph 3, third panel).³ Moreover, a 1 percentage point increase in the employment share of firms aged five years or under raises overall employment growth by 0.3 percentage point after two years (fourth panel).

Thus, limited restructurings, including inefficient bankruptcy regimes, can hinder the necessary adjustment. Bankruptcy proceedings can take an inordinate amount of time (Graph 4, left-hand panel), leaving the economy vulnerable to adverse aggregate dynamics through negative demand spillovers. And even if they are quick, they may not be very efficient in reallocating claims, resulting too often in the destruction of firm-specific knowledge, especially at small and medium-sized enterprises (SMEs).⁴ Structural rigidities can also hold back the growth of new activities, thus complicating the exit problem further (right-hand panel).⁵ Flexible product and labour markets can hence help accelerate the necessary restructuring. On average, countries with flexible product markets have stronger restrictions on collective dismissals. That said, some economies have less flexibility along both dimensions, which could slow necessary restructurings.

Efficient bankruptcy regimes and flexible labour and product markets speed up restructuring

Graph 4



¹ Recovery rate is recorded as cents on the dollar recovered by secured creditors through reorganisation, liquidation or debt enforcement (foreclosure or receivership) proceedings. Data collection was completed in May 2019. ² Collective dismissal restrictions: higher values indicate more restrictions. ³ Overall index; higher values indicate greater government distortions and barriers to entry.

Sources: OECD, *Product Market Regulation Statistics*; World Bank, *Doing Business*; authors' calculations.

Policy implications

Facing unprecedented urgency and uncertainty, policymakers initially geared their measures towards stabilising financial markets, preventing firms' bankruptcies and containing labour market hysteresis effects. However, as uncertainty gradually recedes and the structural changes brought about by the pandemic become clearer, it is widely agreed that policy has to adjust. This implies shifting the focus from crisis management towards facilitating reallocations from firms and sectors with poor prospects towards promising activities. In other words, a transition from monetary to fiscal and structural policies as well as

³ The growing incidence of so-called zombie firms since the GFC as well as recent evidence for the United States based on firm surveys confirm the urgent need for reallocation (Banerjee and Hofmann (2018, 2020)).

⁴ Bankruptcy courts are often better at reorganising large businesses than SMEs. In the United States for instance, two thirds of SMEs are liquidated rather than reorganised. See Skeel (2020).

⁵ See BIS (2013) for a discussion of how structural rigidities affect the reallocation of resources.

a shift from blanket to more targeted support. Leveraging on the assessment and participation of private sector investors to distinguish viable from unviable firms will be key.

Markets and policymakers face challenges in terms of debt restructuring and resource reallocation. Countries that have in the past encouraged a prompt clean-up of bank balance sheets have typically benefited from a more dynamic economic rebound (Borio et al (2010)). But smoothly rotating from the current stance of regulatory relief to one of clean-up will be demanding. Measures to facilitate the work-out of troubled loans and to reduce legal uncertainty for creditors would speed up reallocations and dampen the economic impact of corporate defaults. This would be particularly important if a large wave of insolvencies were to overwhelm courts, a context in which bankruptcy regimes tend to be less efficient and liquidations more frequent.

Still, an ample degree of monetary policy accommodation is likely to remain appropriate for quite some time to support demand during a possibly protracted period of lacklustre activity. It usually takes around two years for bankruptcies to peak and another two before new entrants fill the gap. And risks appear biased to the downside: the unbalanced nature of the Covid-19 shock could aggravate the recession (Guerrieri et al (2020)). Thus, policy needs to address potential inefficiencies from aggregate demand spillovers as well as inefficient resource allocations.

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