The Calm Before the Storm: Early Evidence on Business Insolvency Filings After the Onset of COVID-19[1]

February 25, 2021

The COVID-19 pandemic brought forward an unprecedented economic contraction. Recessions, in turn, have typically been accompanied by an increase in the number of firms using the insolvency system. This note explores the early impact the pandemic has had on business insolvency filings, based on information from a newly created dataset. Contrary to early expectations, most economies surveyed have experienced a decline in the number of business insolvencies relative to Q2 and Q3 of 2019. shows that legal reasons may have played a key role in this decline as almost all economies covered introduced emergency measures making it more difficult to push a debtor into insolvency. Looking forward, the note explores evidence from previous crisis together with underlying factors -such as lower sales, higher unemployment, firm liquidity challenges, and heightened corporate vulnerabilities- to investigate whether the risk of a wave of insolvencies has disappeared. The analysis suggests that a rise in insolvency filings is likely to have just been postponed, renewing the calls to strengthen insolvency frameworks in EMDEs.

1. Introduction

The advent of the COVID-19 pandemic rapidly led the world to an unexpected recession.[2] Health containment and mitigation efforts hindered workers' ability to perform their jobs. The production of goods and services was immediately impacted, leading to widespread global value chains disruptions.[3] Demand for many goods, such as metals, oil, and transport-related commodities also tumbled.[4] Global financial markets became highly volatile as investors struggled to assess and price the impact of the outbreak.[5] Moreover, recent estimates project that an

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[2] See https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii; https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/
[3] See https://blogs.worldbank.org/voices/how-covid-19-transforming-global-value-chains-lessons-ethiopia-and-vietnam; Paul Antras De-Globalisation? Global Value Chains in the Post-Covid-19 Age, working paper, available at https://www.nber.org/system/files/working_papers/w28115/w28115.pdf
[4] See https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world
[5] See Erik Feyen et al. "COVID-19 Outbreak: Financial Sector Vulnerabilities. Which Countries and Regions are More Exposed? A Preliminary Assessment", World Bank, 2020.

additional 88 to 115 million people will be pushed into extreme poverty in 2020, a three year setback on extreme poverty reduction.[6]

Economic downturns have been known to generate increases in the number of insolvencies[7] and the advent of the COVID-19 pandemic is expected to have a similar effect. For instance, a wave of restructurings and bankruptcy filings occurred in the aftermath of the 2001 Argentine crisis.[8] Similarly, during the Global Financial Crisis the Netherlands experienced a 50 percent increase in the number of enterprise filings in 2009 relative to 2008.[9] The stark depth of the COVID-19 crisis suggests that many firms in advanced and emerging economies may face the real possibility of filing for insolvency as their financial and/or balance sheet situations deteriorate.

This brief focuses on insolvency to discuss what the early expectations of the pandemic were in this area, to take stock of what has transpired since the start of the crisis, and to explore in historical context the business insolvency outlook as the crisis unfolds. Specifically, it provides preliminary evidence on the evolution of business insolvency filings for several economies across the globe. This early data shows that for almost all of the selected economies reviewed in this note the number of formal business insolvency cases has dropped, often significantly, in a year-to-year comparison of quarters (Q) 2 and 3 of 2020. The brief then explores factors which may have influenced this drop. Specifically, it uses a novel data set to provide early evidence on the legal intervening factors which may have led to this drop. Finally, the note makes use of historical and current data to underscore that a rise in insolvency filings is expected in the short- to medium-term.

2. COVID-19 and the expectations of an instant rise in insolvency filings

The uncertainty and health risks introduced by the COVID-19 pandemic were largely unexpected. The rapid spread of the virus -with its accompanying hospitalizations and deaths- prompted governments around the world to introduce strong containment and mitigation efforts, including lockdown measures. Economies around the globe felt the pandemic hit. In Q2 of 2020, OECD gross domestic product (GDP) fell by an unprecedented rate of almost 10 percent, a GDP decrease four times larger than the previous historical record (during Q1 of 2009) in these

[6] See Poverty and Shared Prosperity 2020. Reversals of Fortune, World Bank, 2020 (available at https://openknowledge.worldbank.org/bitstream/handle/10986/34496/9781464816024.pdf).
[7] See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020.
[8] See https://cincodias.elpais.com/cincodias/2002/04/02/economia/1017883411_850215.html. This wave was later interrupted by a forceful conversion of financial assets and liabilities that were denominated in dollars into pesos (i.e. the "pesification"), effectively introducing a large wealth transfer from creditors to debtors. See Miguel Kiguel "Argentina's 2001 Economic and Financial Crisis: Lessons for Europe", available at https://www.brookings.edu/wp-content/uploads/2016/06/11_argentina_kiguel.pdf
[9] See Fernando Dancausa and Sergio Muro "COVID-19 Outbreak: Corporate Insolvency. How Can Out-of-Court Workouts Help?", World Bank, 2020 (available at https://worldbankgroup.sharepoint.com/sites/gge/Documents/COVID-19%20Response%20Documents/COVID-19%20Outbreak%20-%20Corporate%20Insolvency%203rd%20Note%20v11_clean.pdf).

countries.[10] The drop in GDP of the G20 countries was not as sharp during Q2 of 2020, yet still established a record by falling almost 7 percent.[11]

Initial analysis suggested a large negative impact of the pandemic on the solvency of firms. Early estimates from the Bank for International Settlements based on a sample of 40,000 listed and large unlisted non-financial firms across 26 advanced and emerging economies suggested that up to fifty percent of firms could face cash shortages to service their debts during the first year of the pandemic.[12] The Future of Business Survey -covering more than 30,000 small business leaders from over 50 countries- reported reduced sales for small businesses and that over 25% had closed down during the first five months of 2020.[13] Further, individuals in many countries experienced sharp decreases in income as unemployment grew.

The negative economic impact of the pandemic arrived at a moment when both public and private sector leverage were at historic levels. By Q1 of 2020 public debt was at all-time high in most systematically important economies.[14] Private domestic debt in emerging markets and developing economies (EMDEs), in turn, stood at 118% of GDP at the end of 2019, nearly doubling the 2009 levels.[15] This combination of factors limited the ability of some firms and governments to cope with the crisis and for the latter to implement countercyclical policies. As a result, the situation appeared ripe for a large number of defaults in the private sector, as a rise in non-performing loans (NPLs) typically follows the onset of a crisis.[16]

In this context, a rapid consensus emerged on the expected rise of the number of insolvency cases. Academic papers,[17] Federal Reserve blog posts[18], and news outlets[19] have been some of the

[10] See https://www.oecd.org/sdd/na/gdp-growth-second-quarter-2020-oecd.htm. This GDP reduction came after the OECD area experienced a 2 percent GDP drop in the first quarter of 2020. See https://www.oecd.org/sdd/na/growth-and-economic-well-being-first-quarter-2020-oecd.htm

[11] See https://www.oecd.org/sdd/na/g20-gdp-growth-second-quarter-2020-oecd.htm. See also "Record Global GDP Contraction Indicative of COVID-19's Cross-Country Effect", https://www.dallasfed.org/research/economics/2020/1006

[12] See "Covid-19 and corporate sector liquidity", BIS Bulletin No. 10, 28 April 2020, https://www.bis.org/publ/bisbull10.pdf.

[13] See "Facebook/OECD/World Bank (2020), The Future of Business Survey", available at: https://dataforgood.fb.com/global-state-of-smb/

[14] See "GLOBAL FINANCIAL STABILITY OVERVIEW", IMF, October 2020.

[15] Indeed, an early balance sheet stress test exercise based on pre-COVID-19 data suggests that non-financial companies in EMDEs may be vulnerable to liquidity and earnings shocks. See Feyen, E., Dancausa, F., O'Reilly Gurhy, B., Nie, O., 2020. COVID-19 and EMDE corporate balance sheet vulnerabilities: A simple stress-test approach, Policy Research Working Paper Series (No. WPS 9324). Washington, DC, USA.

[16] See Anil Ari, Sophia Chen, Lev Ratnovski "The Dynamics of Non-Performing Loans During Banking Crises: A New Database", IMF Working Paper, WP/19/272, December 2019.

[17] See Robin Greenwood, Ben Iverson and David Thesmar "Sizing up corporate restructuring in the COVID crisis", working paper, available with the authors; Pierre-Olivier Gourinchas, Kalemli-Ozcan, Sebnem, Penciakova, Veronika and Nikc Sander, 2020, "COVID-19 and SME failures", NBER WP No 27877; Altman, Edward I., 2020, "Covid-19 and the Credit Cycle," Journal of Credit Risk 16, 67-94.

[18] See Nicolas Crouzet and François Gourio, "Financial Positions of U.S. Public Corporations," Federal Reserve Bank of Chicago, Chicago Fed Insights Blog Posts, May-June 2020

[19] See "Americans households are about to get hit by a devastating wave of bankruptcies" (https://www.businessinsider.com/american-households-about-to-get-hit-by-wave-of-bankruptcies-2020-5); "Here comes the bankruptcy wave" (https://www.marketplace.org/2020/05/14/here-comes-the-bankruptcy-wave/); "Wave of U.S. Bankruptcies Builds Toward Worst Run in Many Years" (https://www.bloomberg.com/news/articles/2020-05-07/wave-of-bankruptcies-builds-as-debt-and-virus-clobber-companies); "America Inc faces a wave of bankruptcies" (https://www.economist.com/business/2020/05/16/america-inc-faces-a-wave-of-bankruptcies); "France faces massive wave of bankruptcies by end April", (https://www.rfi.fr/en/business/20200409-france-faces-massive-wave-of-bankruptcies-small-businesses-end-april-coronavirus-lockdown-economy-covid-19); "Coronavirus credit crunch could make 2008 look like 'child's play'" (https://www.theguardian.com/world/2020/mar/20/coronavirus-crisis-could-lead-to-new-credit-crunch-as-companies-

channels whereby the economic and financial community has expressed this view. To start exploring this expectation, the next section reviews early data on insolvency filings.

3. The evolution of insolvency filings in the 2019-2020 period

From a historical perspective, insolvency has been an area where data has been hard to obtain. In recent years, however, several governments and private institutions have been providing open access to insolvency filings information. In this section, we take advantage of this development to gather a small dataset of business insolvency filings with the aim to explore their evolution pre- and post-pandemic. To do so, we searched public records for insolvency information from a list of 62 economies (see Annex 1 for a complete list) included in the World Bank & INSOL International *Global Guide: Measures adopted to support Distressed Businesses through the COVID-19 crisis* (from now on, the Global Guide).[20] Specifically, we collected information on monthly business filings starting in 2011. In many cases, we were not able to find the information we looked for because some governments did not collect it or publish it, while in others the information we found was incomplete. The analysis on the rest of this section is based on the data from 15 economies where we found monthly data on business insolvency filings.[21]

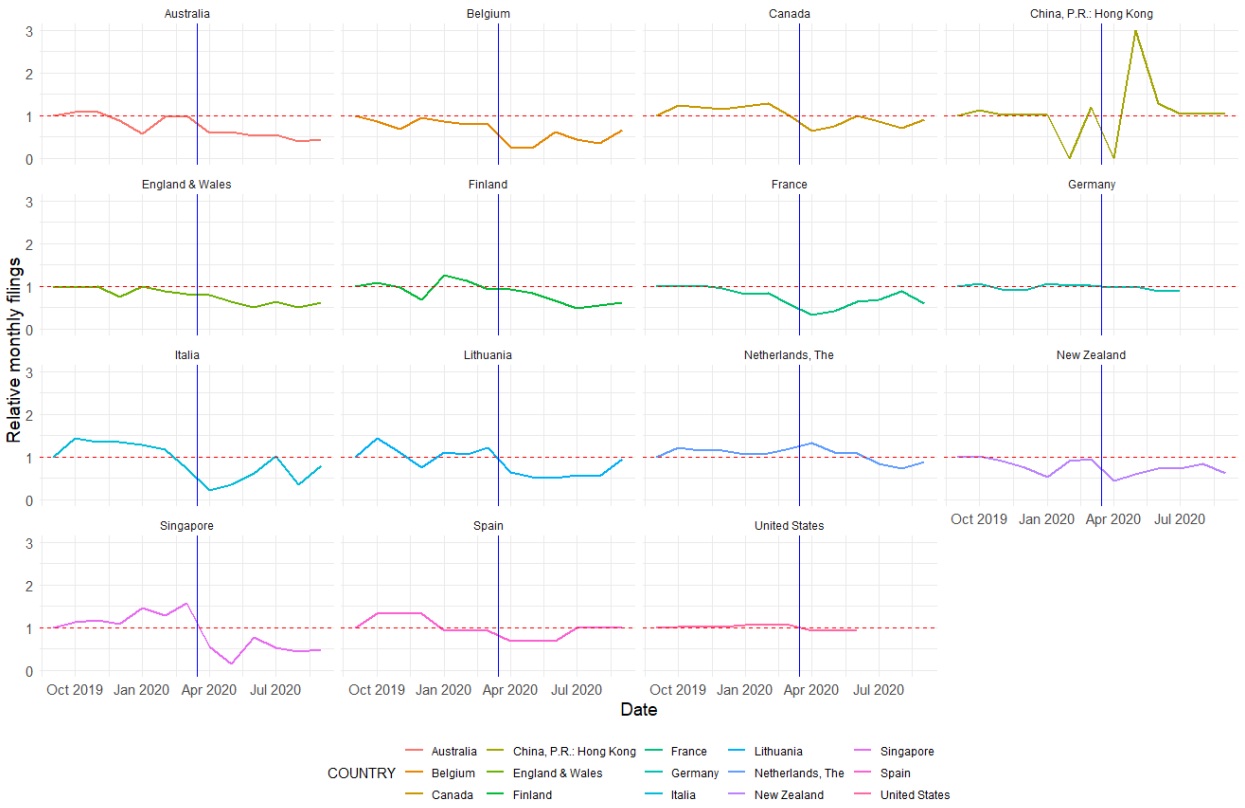
Figure 1 below suggests that economies have yet to experience a sharp increase in business insolvency filings. Indeed, when compared to the number of business filings within each economy in September 2019 (normalized to 1), it is apparent that many countries have experienced declines in the number of business filings. Furthermore, when comparing the cumulative number of business insolvency filings from Q2 and Q3 of 2019 to the same quarters of 2020 all the economies in our sample (with the lone exception of Hong Kong) have seen a decline. Australia, Italy, Lithuania and Singapore show the highest declines (about 50%).

struggle-with-debt); "Thousands of coronavirus bankruptcies ahead for NL: credit insurer" (https://nltimes.nl/2020/06/18/thousands-coronavirus-bankruptcies-ahead-nl-credit-insurer); "How Covid-19 is escalating problem debt" (https://www.ft.com/content/4062105a-afaf-4b28-bde6-ba71d5767ec0); "Brussels seeks to help banks offload rising tide of bad loans" (https://www.ft.com/content/294e7af5-7eff-4d38-89f0-6985eb20abb2?shareType=nongift); among many others.

[20] Available at http://pubdocs.worldbank.org/en/194131592248086470/global-guide.pdf. The countries surveyed represent more than 82% of the world's GDP (based on World Bank 2019 data).

[21] It should be noted that for two countries (Spain and the United States) the information was found on a quarterly basis, so the monthly results are derived from the quarterly data. In addition, it should be mentioned that the data reported for New Zealand encompasses both business and non-business filings.

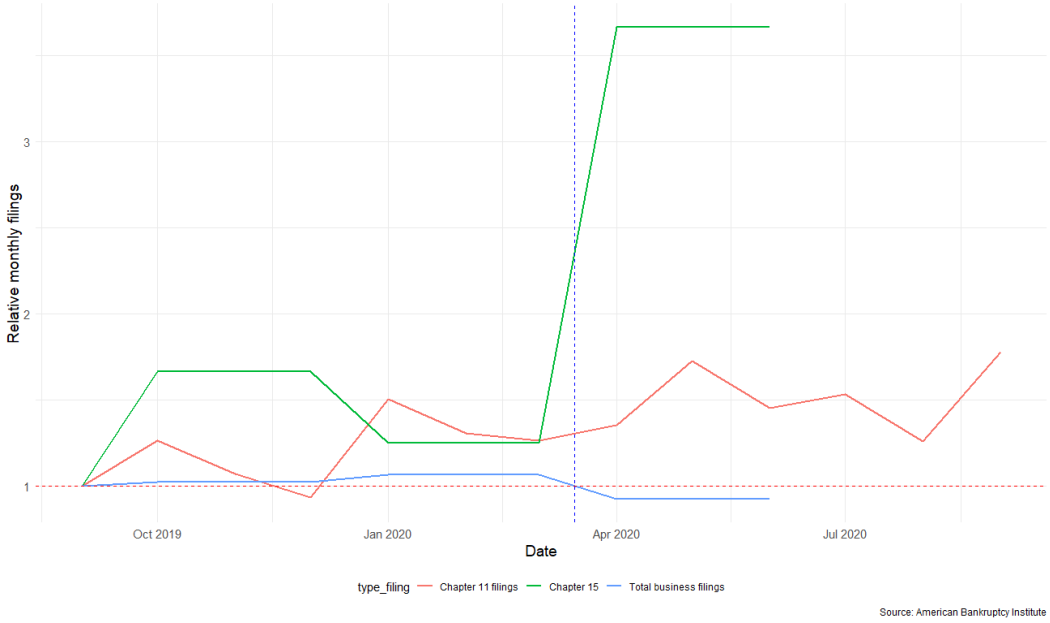
Figure 1: Relative Monthly Change in Business Bankruptcy Filings (compared to September 2019), by Country



While the total number of Q2 and Q3 business insolvency filings have decreased year to year in 2020,[22] this decrease has not been even. Evidence from the United States suggest that some insolvency proceedings are on the rise (Figure 2). For instance, filings by foreign companies - which can use Chapter 15 of the Bankruptcy Code to file in the United States if they meet certain requirements- have risen almost 3 times from Q1 2020 to Q2 2020.[23] Chapter 11 filings -which is more heavily used by larger firms- have risen by almost 45% when comparing Q2 and Q3 2019 to the same period in 2020.[24] Similarly, insolvencies have started to rise again in September in Canada after being down since April of 2020.[25]

[22] See section III above.
[23] See https://abi-org.s3.amazonaws.com/Newsroom/Bankruptcy_Statistics/Chapter15Filings.xls++%5BCompatibility+Mode%5D.pdf
[24] See https://www.abi.org/newsroom/bankruptcy-statistics
[25] See https://www.ic.gc.ca/eic/site/bsf-osb.nsf/eng/h_br01011.html

Figure 2: Relative Monthly Change in Bankruptcy Filings (compared to September 2019), Chapters 11 and 15 Segregated



4. Understanding the recent business insolvency filings drop

The lack of an early spike in the number of business insolvency filings -and in fact a decline in several countries- runs counter to the theory, as NPL levels and insolvency filings tend to grow at times of economic crisis.[26] In this section we briefly explore the possible reasons for this counterintuitive finding, with an emphasis in emergency legal interventions.

Relative to previous crises, governments have reacted swiftly in the wake of the economic downturn.[27] According to IMF calculations, us$9 trillion in fiscal support were injected globally by May of 2020.[28] These interventions included spending and revenue measures of over us$3 trillion, as well as loans, equity injections, and guarantees of over us$ 4 trillion.[29] The fiscal support has not been evenly distributed, being much higher in advanced economies than in emerging

[26] See Anil Ari, Sophia Chen, Lev Ratnovski "The Dynamics of Non-Performing Loans During Banking Crises: A New Database", IMF Working Paper, WP/19/272, December 2019; See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020; Thomas A. "The Rise in Personal Bankruptcies: The Eighth Federal Reserve District and Beyond," Federal Reserve Bank of St. Louis Review, 89:1, January/February 2007, pp. 15–37 (for consumer insolvency).
[27] A recent study of 154 countries has shown that all of these countries have adopted at least one financial support measure and that 60 percent of these countries has adopted at least three of these measures. See Erik Feyen et al. "Evolution and Determinants of the Financial Sector Policy Response to the COVID-19 Pandemic: A New Global Database", working paper, available with the authors.
[28] https://blogs.imf.org/2020/05/20/tracking-the-9-trillion-global-fiscal-support-to-fight-covid-19/
[29] See International Monetary Fund (IMF). 2020. Fiscal Monitor: Policies to Support People During the COVID-19 Pandemic. Washington, April.

ones.[30] These large stimulus packages -including direct deposits to individuals,[31] corporate debt purchases,[32] providing public guarantees for bank loans,[33] or liquidity or capital injections to financial institutions[34]- have likely helped many firms to weather the storm since the initial months of the COVID-19 crisis. In addition to these interventions, some central banks have allowed for some levels of regulatory forbearance by, for example, tolerating higher NPL levels at financial institutions[35] or by easing asset classification rules for loans to MSMEs.[36] Other measures were directed to increase flexibility in the use of capital buffers, to restrict dividend or bonuses payouts, or to ban short-selling in order to lessen market volatility.[37] A recent study of financial sector policy responses to the COVID-19 crisis shows that all 154 of the countries reviewed have introduced at least one policy intervention, with 80 percent of the measures being introduced early in the process, by June 1st 2020.[38]

Firms have also adjusted in order to diminish the impact of the crisis. Given the nature of the pandemic crisis, many firms have attempted to temper sales' reductions by increasing their digital presence or switching to health-related markets.[39] Moreover, firms have also significantly cut expenditures on innovation and non-essential items.[40] Reductions in employment demand have also happened, concentrated to a large extent on reducing workers' hours or wages, and granting leaves.[41]

While governments' support and firms' reactions have certainly played a role in the relative decrease in business insolvency filings, other more direct legal measures may have had a larger impact. Several countries have put in place short-term insolvency and insolvency-related measures to help ensure firms and consumers have breathing space during the core of the crisis. In what follows, we explore these measures following the framework of Phase 1 measures laid out in "COVID-19 Outbreak: Implications on Corporate and Individual Insolvency".[42] The Phase 1

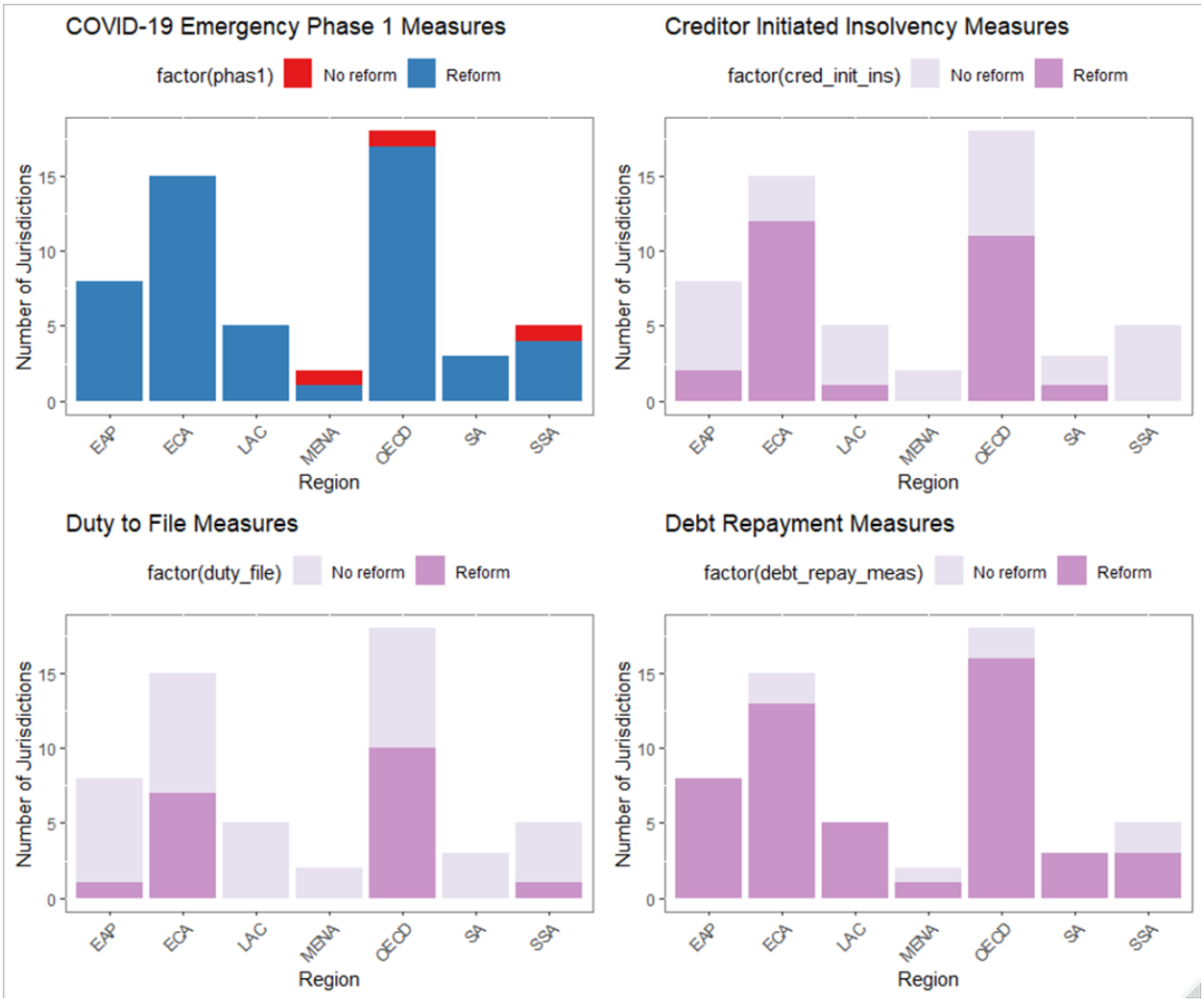
[30] See "The fiscal response to the Covid-19 crisis in advanced and emerging market economies", Enrique Alberola, Yavuz Arslan, Gong Cheng and Richhild Moessner, BIS Bulletin No. 23, 2020 (suggesting that important gaps existed in budgetary measures, funding facilities and credit guarantee schemes; fiscal policy space, procyclicality in spending, ability to engage in quantitative easing, as well as structural institutional considerations may help explain these differences). See also Benmelech, E., Tzur-Ilan, N., 2020. The determinants of fiscal and monetary policies during the Covid-19 crisis, NBER Working Paper (No. 27461). National Bureau of Economic Research, Cambridge, MA, USA. https://doi.org/10.3386/w27461
[31] See CARES ACT in the United States.
[32] See European Central Bank's Pandemic Emergency Purchase Programme (PEPP).
[33] See also Erik Feyen et al. "Evolution and Determinants of the Financial Sector Policy Response to the COVID-19 Pandemic: A New Global Database", working paper, available with the authors.
[34] See Canada's Standing Term Liquidity Facility.
[35] See the case of China (source: IMF Policy Tracker, available at https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19).
[36] See the case of India (source: IMF Policy Tracker, available at https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19).
[37] See also Erik Feyen et al. "Evolution and Determinants of the Financial Sector Policy Response to the COVID-19 Pandemic: A New Global Database", working paper, available with the authors.
[38] Id.
[39] See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020.
[40] See S. R. Baker, N. Bloom, S. J. Davis, and S. J. Terry. COVID-induced economic uncertainty. Working Paper 26983, National Bureau of Economic Research, April 2020. URL: http://www.nber.org/papers/w26983
[41] See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020.
[42] See Antonia Menezes and Sergio Muro, COVID-19 Outbreak: Implications on Corporate and Individual Insolvency, EFI C19 Notes, available at http://pubdocs.worldbank.org/en/912121588018942884/COVID-19-Outbreak-Implications-on-Corporate-and-Individual-Insolvency.pdf

measures involved interventions directed to prevent viable firms from prematurely being pushed into insolvency.

To understand the interventions in this space, we created a database of measures taken by the economies included in the Global Guide. The measures in Phase 1 were divided into three categories, namely i) increasing barriers for creditor-initiated insolvency filings (from now on, creditor-initiated insolvency measures), ii) suspending the duty to file for insolvency and the related liabilities (from now on, duty to file measures), and iii) debt repayment emergency measures (from now on, debt repayment measures). We revised the interventions in each country to manually code them.[43] Figure 3 below shows the results by region. As it can be seen, almost all economies in our sample have introduced emergency Phase 1 measures making it more difficult to force firms into insolvency (top left panel). Breaking down the different categories of measures in Phase 1, it is apparent that duty to file measures (ii) were the least frequently adopted with only 30% of the economies introducing them (lower left panel). In turn, debt repayment measures (iii) were implemented in over 80% of the economies in our sample (lower right panel).

[43] The coding was based on information last updated in July 2020.

Figure 3



While creditor-initiated insolvency measures and duty to file measures directly impact insolvency proceedings, emergency debt repayment interventions have a broader aim. These measures may affect individuals who are not in financial distress, yet they could play a key role in preventing insolvency filings while they are in effect. Given their frequency (as shown in Figure 3), Figure 4 shows a breakdown of the emergency debt repayment measures. The two most frequently adopted interventions involved mandatory contract modification measures, addressing either the prospects of repayment or the effects of non-payment (top two charts in Figure 4). Illustrations of the first type of measure include extending the repayment terms of a set of loans,[44] or suspending interest accruals[45] or even periodic debt service obligations.[46] As per non-payment effects measures, some countries have impeded the unilateral termination of certain agreements,[47]

[44] See Portugal's Decree-Law No. 10-J/2020 ("Moratorium Regime"), March 26, 2020.
[45] See Spain's Royal decree-law 8/2020. Other countries allow for interest accruals but postpone their payment. See Hungary's Government Decree 47/2020 (the interests accrued during the payment moratorium do not capitalize).
[46] See Italian State guarantee scheme to support SMEs affected by coronavirus outbreak (https://ec.europa.eu/commission/presscorner/detail/en/ip_20_530).
[47] See Bulgaria State of Emergency measures Act enacted on 20 March 2020.

prohibited the acceleration of contractual terms,[48] eliminated interests and penalties,[49] or banned the repossession of property.[50] Both of these categories of measures can be focused on certain subjects (e.g. consumers[51] or MSMEs[52]), certain type of transactions (e.g. bullet loans[53] or mortgage payments[54]), or specific timeframes (e.g. up to one month after the end of the state of national sanitary urgency[55] or until December 31st 2020[56]).

Suspensions of judicial proceedings measures have been less common, being introduced in only a quarter of the studied jurisdictions (Figure 4). The type of suspensions introduced have been varied. Some countries have opted to address litigation at inception, suspending all non-urgent court proceedings[57] or all civil proceedings -except for those suspensions that may result in material injury to the parties.[58] Others have focused on specific pre-trial actions prohibiting attachment of individuals' bank accounts or distrains of employment remuneration or pensions.[59] Yet a smaller subset of countries chose to focus on the execution stage directly suspending executions, or more narrowly suspending the execution of certain assets of individuals[60] or the auction of immovable property.

[48] See France's Ordinance No. 2020-306 of 25 March 2020.
[49] See Bulgaria's State of Emergency measures Act enacted on 20 March 2020.
[50] See Bulgaria's State of Emergency measures Act enacted on 20 March 2020.
[51] See consumer credit moratorium in Spain's Royal decree-law 8/2020.
[52] See Italian State guarantee scheme to support SMEs affected by coronavirus outbreak (https://ec.europa.eu/commission/presscorner/detail/en/ip_20_530).
[53] See Portugal's Decree-Law No. 10-J/2020 ("Moratorium Regime"), March 26, 2020. Bullet loans are those where the entire principal of the loan is due at the end of the term of the loan.
[54] See Spain's Royal decree-law 8/2020.
[55] See France's Ordinance No. 2020-306 of 25 March 2020.
[56] See Hungary's Government Decree 47/2020.
[57] See Portugal's Decree-Law No. 10-J/2020 ("Moratorium Regime"), March 26, 2020.
[58] See Italian State guarantee scheme to support SMEs affected by coronavirus outbreak (https://ec.europa.eu/commission/presscorner/detail/en/ip_20_530).
[59] See Bulgaria's State of Emergency measures Act enacted on 20 March 2020.
[60] See Bulgaria's State of Emergency measures Act enacted on 20 March 2020.

Figure 4

Taken together, the drop in the number of business insolvency filings is a complex phenomenon. Monetary, fiscal and regulatory measures have been used to attempt the soften the impact of the COVID-19 crisis and probably have contributed to this result. Less prominent in the literature so far has been the incidence of emergency legal interventions. As this section has showed, the prevalence of the latter type of measures suggests that they have also played a role in lowering business insolvency filings.

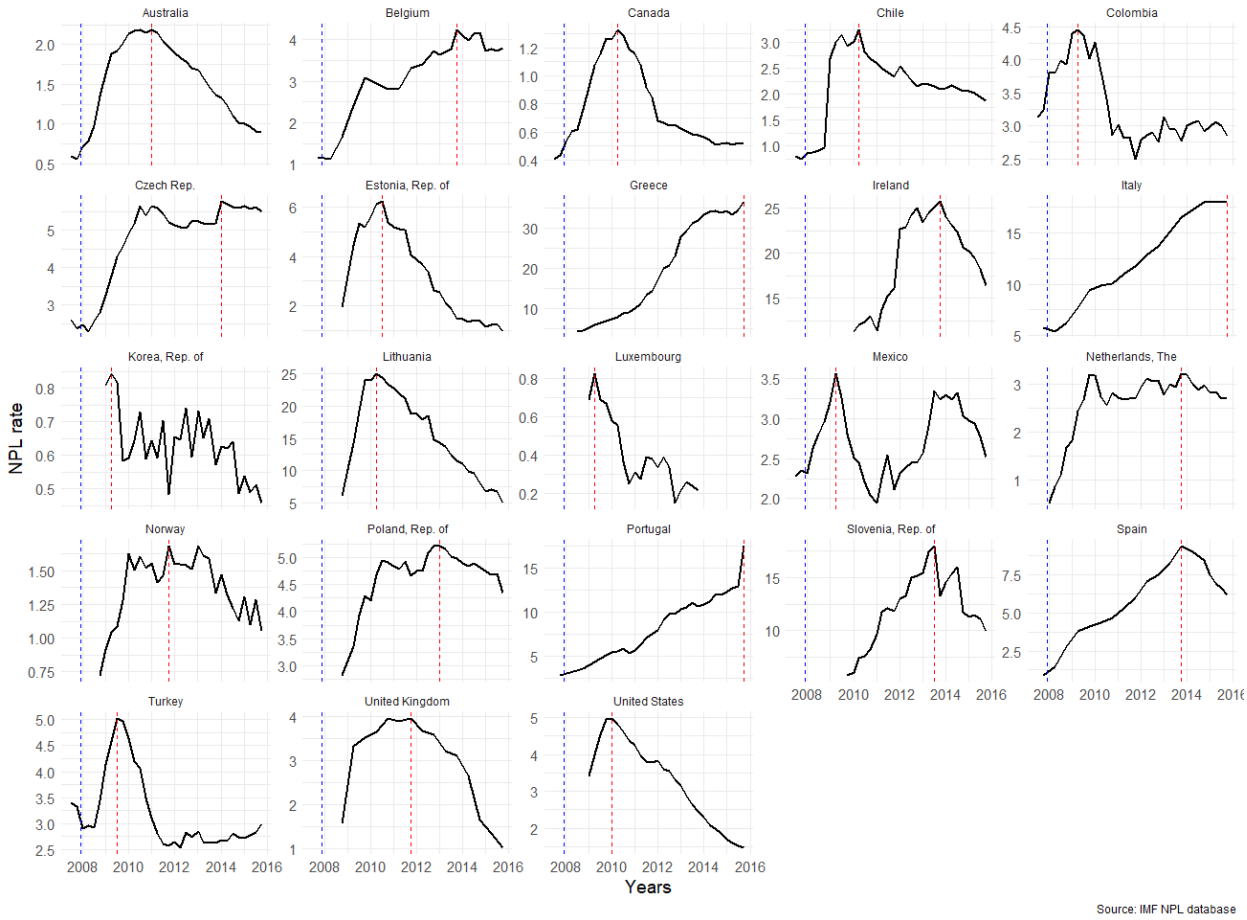
5. The insolvency challenge ahead

Several factors -including lower sales, higher unemployment, firm liquidity challenges, and heightened corporate vulnerabilities- point to an increase in the number of business insolvency filings. The multi-layered measures discussed in the previous section point to several factors contributing to a reduction in the rate at which business insolvency cases have been filed in recent months. A question that follows is whether this reduction will be a temporary situation or whether this crisis will be an exception in terms of the increase in new insolvency filings. This section explores the factors which may suggest that insolvency filings are yet to come.

Evidence from previous crises suggest that NPL build-up takes several quarters to peak. NPLs and insolvencies are highly related.[61] As more debtors' default, an increase in insolvency filings typically follow. Yet, the process of NPL build-up is often lengthy. For instance, taking December 2007 as the date where the Global Financial Crisis began,[62] the median lag between the onset of the crisis (blue dashed line) and the peak NPL levels (red dashed line) was approximately 13 quarters for the OECD countries in Figure 5.[63] As per the non-OECD countries in our data (see Figure 9 in Annex 2), the median lag was 11 quarters. More broadly, a recent paper found that NPL levels keep rising for 2.4 years, on average, following the onset of a crisis.[64] Furthermore, NPLs keep rising for 4 or more years in over 20 percent of the crises.[65] This evidence suggests that the current crisis is likely to follow a similar path, with NPL build up growing over time and likely developing first in i) some of the sectors most affected by the lockdown and social distancing, such as airlines, hospitality, energy, and financials; and, ii) smaller firms with thin equity cushions, concentrated sources of revenues, low liquidity levels and few financing options.[66]

[61] See Antonia Menezes and Sergio Muro "How Insolvency & Creditor/Debtor Regimes Can Help Address Non-Performing Loans", World Bank, 2020.
[62] This is the date when the Great Recession started, sparking the Global Financial Crisis. See https://www.stlouisfed.org/publications/regional-economist/october-2015/recovery-from-the-great-recession-has-varied-around-the-world
[63] Figure 5 includes those OECD countries with sufficient information on quarterly NPL levels in the new IMF NPL database.
[64] See Anil Ari, Sophia Chen, Lev Ratnovski "The Dynamics of Non-Performing Loans During Banking Crises: A New Database", IMF Working Paper, WP/19/272, December 2019. For the definition of banking crisis used in this paper, see Luc Laeven and Fabian Valencia "Systemic Banking Crises Revisited", IMF Working Paper, WP/18/206, September 2018.
[65] See Anil Ari, Sophia Chen, Lev Ratnovski "The Dynamics of Non-Performing Loans During Banking Crises: A New Database", IMF Working Paper, WP/19/272, December 2019. For the definition of banking crisis used in this paper, see Luc Laeven and Fabian Valencia "Systemic Banking Crises Revisited", IMF Working Paper, WP/18/206, September 2018.
[66] See "GLOBAL FINANCIAL STABILITY OVERVIEW", IMF, October 2020.

Figure 5: Non-Performing Loans (NPL) Rate in OECD Countries (mid-2007 to 2015), by Quarter

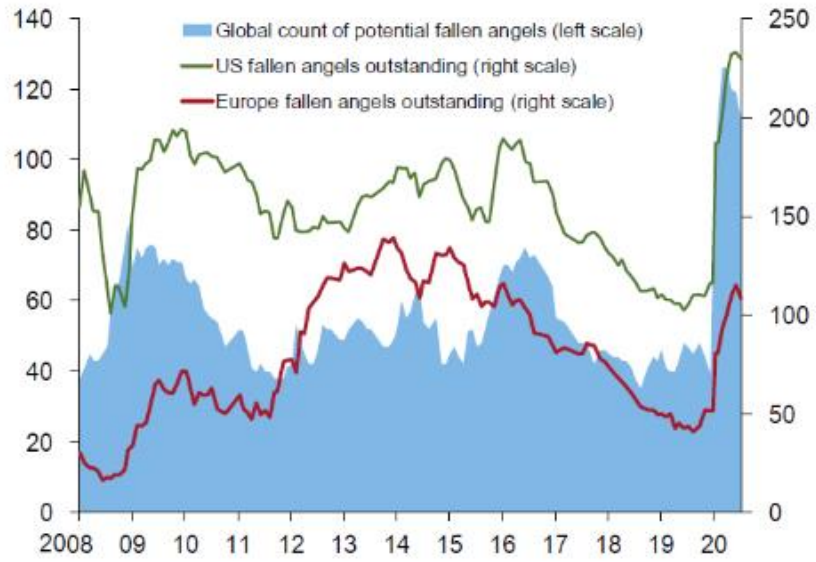


Additional evidence also suggest that business insolvency filings are likely to start rising. Greenwood, Iverson and Thesmar (2020) forecast a substantial increase in the number of corporate bond defaults, as well as a worsening of corporate balance sheets especially in the smallest firms.[67] Using a novel dataset covering more than 100,000 businesses across 51 countries, Apedo-Amah et al. (2020) show that 84 percent of the firms in their sample reported a reduction in sales when compared to the previous year, even ten weeks after the peak of the pandemic.[68] The IMF, in turn, has recently reported that global financial vulnerabilities have continued to rise since the start of the pandemic, partly because firms have borrowed to tackle liquidity shortages during the pandemic.[69] Moreover, the number of bonds with a BBB- rating and a negative outlook (a measure of potential "fallen angels") has tripled globally since the start of the pandemic (Figure 6).[70] The current spike of COVID-19 cases many countries in the northern hemisphere are experiencing -

[67] See Robin Greenwood, Ben Iverson and David Thesmar "Sizing up corporate restructuring in the COVID crisis", working paper, available with the authors.
[68] See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020.
[69] See "GLOBAL FINANCIAL STABILITY OVERVIEW", IMF, October 2020.
[70] See "GLOBAL FINANCIAL STABILITY UPDATE", IMF, January 2021.

coupled with the projected 4.4 percent global GDP contraction for 2020-[71] also suggest further economic pain and, likely, more firms facing financial distress.

Figure 6: Evolution of Potential Fallen Angels (count, left scale; USD billions, right scale)



Source: IMF

Firms' liquidity challenges, which have been recently found to be more acute in EMDEs,[72] **also suggest an increase in insolvency filings.** Larger liquidity constraints increase the chances that workers become unemployed, especially in smaller firms.[73] The link between larger liquidity constraints and higher unemployment, in turn, suggests that firms in EMDEs face a heightened risk of distress.[74] Relatedly, evidence from the Great Recession (Figures 7 and 8) show how closely chapter 11 (i.e. reorganization) and insolvencies of individuals track the unemployment rate in the United States.[75] During the current crisis, the unemployment rate in OECD countries is close to one third higher than it was in March of 2020.[76] . All the above data points in the direction of a higher number of insolvency filings in the near future, following closely the rise in unemployment.[77]

[71] See IMF World Economic Outlook (October 2020).
[72] See Marie Christine Apedo-Amah et al., Unmasking the Impact of COVID-19 on Businesses Firm Level Evidence from Across the World, Policy Research Working Paper 9434, FCI, World Bank, 2020.
[73] See Burcu Duygan-Bump, Alexey Levkov and Judit Montoriol-Garriga "Financing constraints and unemployment: Evidence from the Great Recession", Journal of Monetary Economics, Volume 75, October 2015, Pages 89-105.
[74] Id.
[75] Somewhat similarly to what we see in Figures 7 and 8 when comparing chapter 11 to individual insolvency filings, business filings for larger firms tend to peak earlier than for larger firms. See Figure 10 in Annex 3.
[76] See http://www.oecd.org/sdd/labour-stats/unemployment-rates-oecd-update-november-2020.htm
[77] Indeed, for the US Greenwood, Iverson and Thesmar predicted in September 2020 a 140 percent increase in the number of business filings in the coming year. See Robin Greenwood, Ben Iverson and David Thesmar "Sizing up corporate restructuring in the COVID crisis", working paper, available with the authors.

Figure 7: Total Monthly U.S. Chapter 11 Filings by Business and Unemployment Rate, 2007-2012

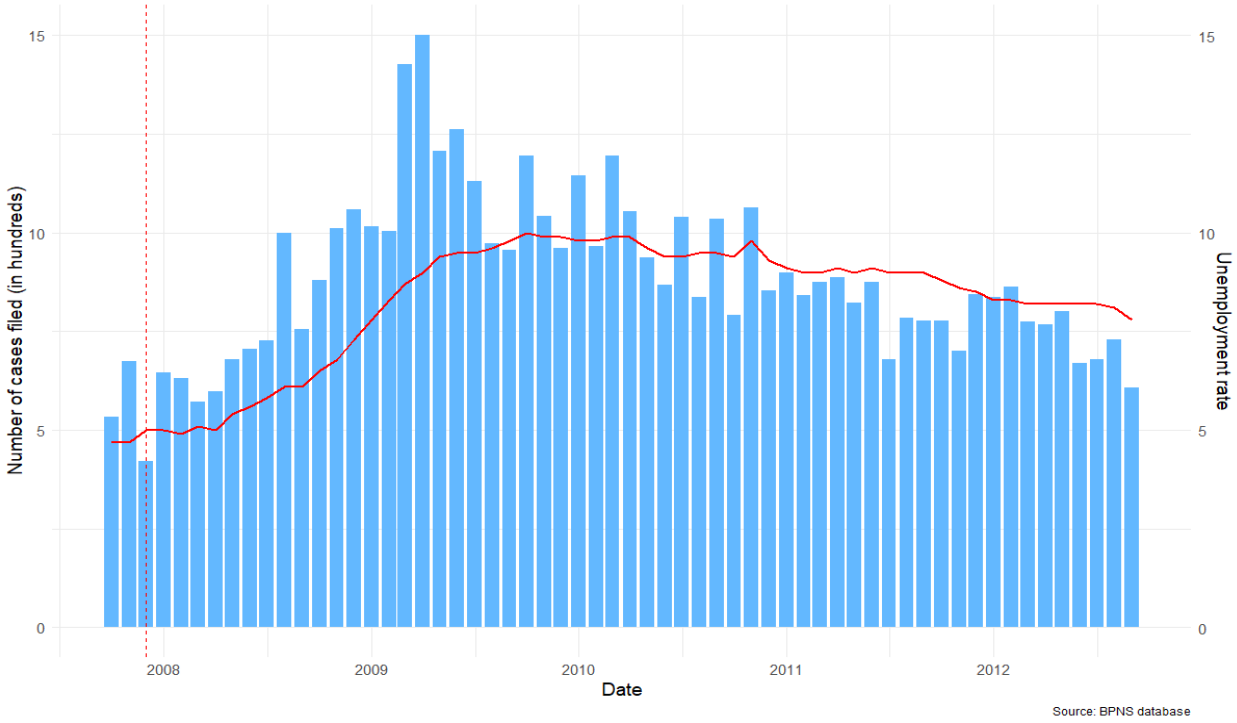
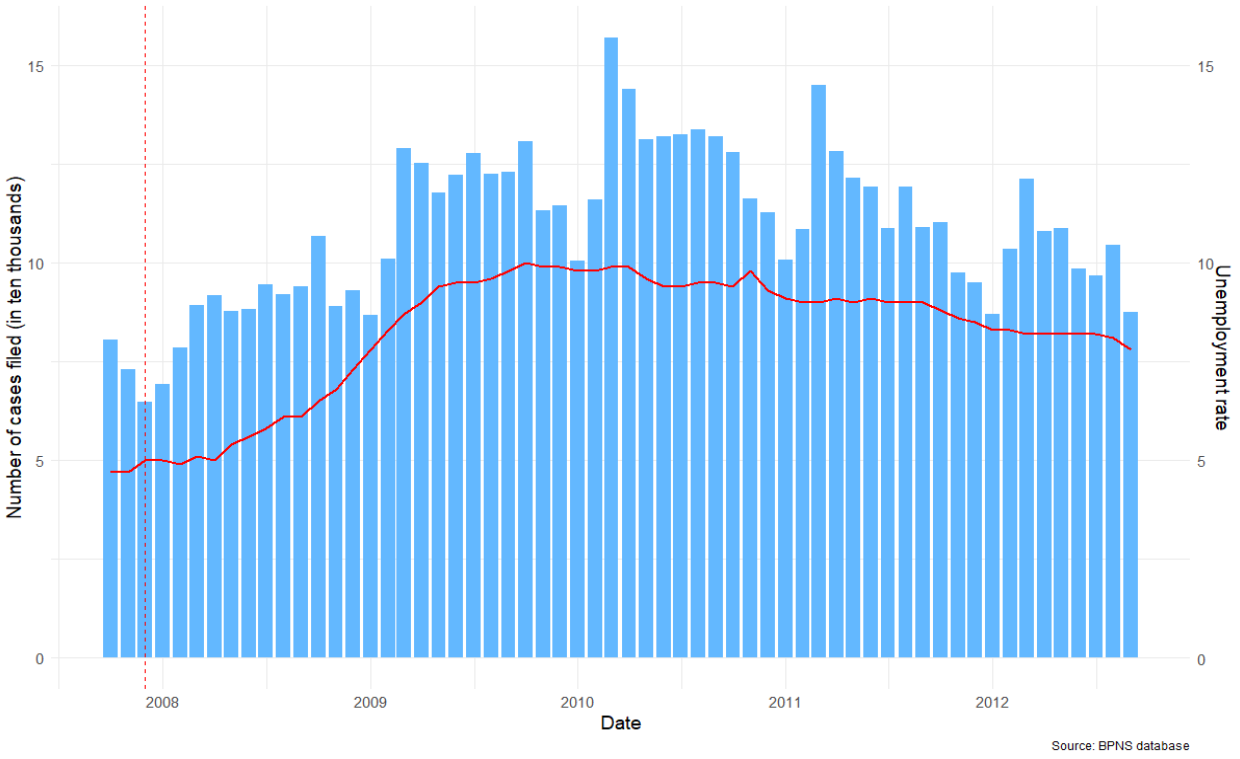


Figure 8: Total Monthly U.S. Bankruptcy Filings by Individuals and Unemployment Rate, 2007-2012



While the number of insolvency filings is expected to grow, some jurisdictions may be tempted to prolong emergency legal interventions carrying no immediate fiscal impact. Countries could potentially continue to make use of these measures to address short-term challenges even if they risk having important negative economic effects in the medium and long-term. In fact, evidence from previous crises shows that some legal emergency measures can be sticky.[78] Hence, while the sunset clauses inserted for insolvency (and insolvency-related) measures during Phase 1 suggest that these interventions will be phased out in the coming months, a risk remains that some of them will be extended into the future by governments with fewer policy options at their disposal.[79]

[78] For instance, in 2014 Ukraine experienced internal and geopolitical tensions, as well as a severe economic downturn. In the midst of these events, the Ukrainian Rada passed Law N° 1304-VII of June 3rd, 2014 "On the moratorium on the collection of property of citizens of Ukraine, provided as collateral for loans in foreign currency". This law provided for a moratorium on foreclosure of real estate for loans issued in foreign currency. While the law was expected to be an emergency measure to deal with the economic crisis in the short-term (see https://www.imf.org/external/pubs/ft/scr/2014/cr14263.pdf), repealing it became a hotly contested political issue. The ban was only lifted in 2019 with the introduction of the new Bankruptcy Code.

[79] On the reasons why countries may have fewer policy options at their disposal, see Erik Feyen et al. "Evolution and Determinants of the Financial Sector Policy Response to the COVID-19 Pandemic: A New Global Database", working paper, available with the authors.

6. Conclusion

This note has explored early evidence on business insolvency filings and has provided novel analysis into the reasons of their recent decrease. A combination of monetary, fiscal, regulatory and legal reasons has helped many firms -and individuals- stave off insolvency. As this note has showed, emergency debt repayment measures were introduced in 80 percent of the economies in our sample to postpone debt repayment or enforcement. While these interventions have prevented a wave of insolvencies, lower sales, higher unemployment, firm liquidity challenges, heightened corporate vulnerabilities, and the expected rise in NPL levels suggest that the risk of a wave of insolvencies has not disappeared. Indeed, the evidence suggests that a rise in insolvency filings is likely to have just been postponed, not avoided.[80]

Strengthening insolvency frameworks to directly and indirectly address the continued prospect of a wave of bankruptcies must remain a priority in EMDEs. Insolvency regimes are designed to save viable businesses while disposing of non-viable businesses and returning assets to productive use.[81] Yet, insolvency systems in emerging markets remain mired with many challenges, as evidenced by an average creditor recovery rate which is a fraction of that of creditors in developed economies.[82] Ensuring that sound firms are given a fair chance to survive is therefore critical. This may entail the introduction of short, medium and long-term reforms, such as enabling out-of-court workouts (OCW), adapting insolvency regulations, and supporting institutions.[83] At the same time, the market exit role of insolvency systems should be preserved. Curving impulses to unnecessarily prolong emergency debt repayment measures would help to avoid a proliferation of 'zombie' firms, which may tie up labor and capital, starve healthy firms of credit and threaten economic recovery.[84]

[80] See "The pandemic bankruptcy wave has been delayed, not avoided" (https://www.ft.com/content/f8396e9e-0d1d-4243-b096-627fdbacefee); "Calm before the storm: COVID19 and the business insolvency time bomb", Euler Hermes/Allianz Research (July 2020), available at https://www.eulerhermes.com/en_global/news-insights/economic-insights/Calm-before-the-storm-Covid19-and-the-business-insolvency-time-bomb.html. This report - covering 44 countries that account for 83% of global GDP - forecasts a 35% surge in business insolvencies from 2019 to 2021, an increase over the two-year period even greater than the one recorded during the global financial crisis (+27% from 2007 to 2009).

[81] See World Bank Principles for Effective Insolvency and Creditor/Debtor Regimes (2016), http://documents.worldbank.org/curated/en/518861467086038847/Principles-for-effective-insolvency-and-creditor-and-debtor-regimes. The World Bank is designated by the Financial Stability Board (together with UNCITRAL) as co-standard setter of the Insolvency and Creditor Rights Standard: https://www.fsb.org/2011/01/cos_051201/.

[82] See Doing Business Report 2020.

[83] See Antonia Menezes and Sergio Muro, COVID-19 Outbreak: Implications on Corporate and Individual Insolvency, EFI C19 Notes, available at http://pubdocs.worldbank.org/en/912121588018942884/COVID-19-Outbreak-Implications-on-Corporate-and-Individual-Insolvency.pdf

[84] Zombies are firms that earn just enough money to continue operating and servicing debt but are unable to pay off their debt, thus diverting resources away from healthy, viable firms. Adalet McGowan et al (2017): "The walking dead: zombie firms and productivity performance in OECD countries," and Ricardo Caballero et al (2008) "Zombie Lending and Depressed Restructuring in Japan."

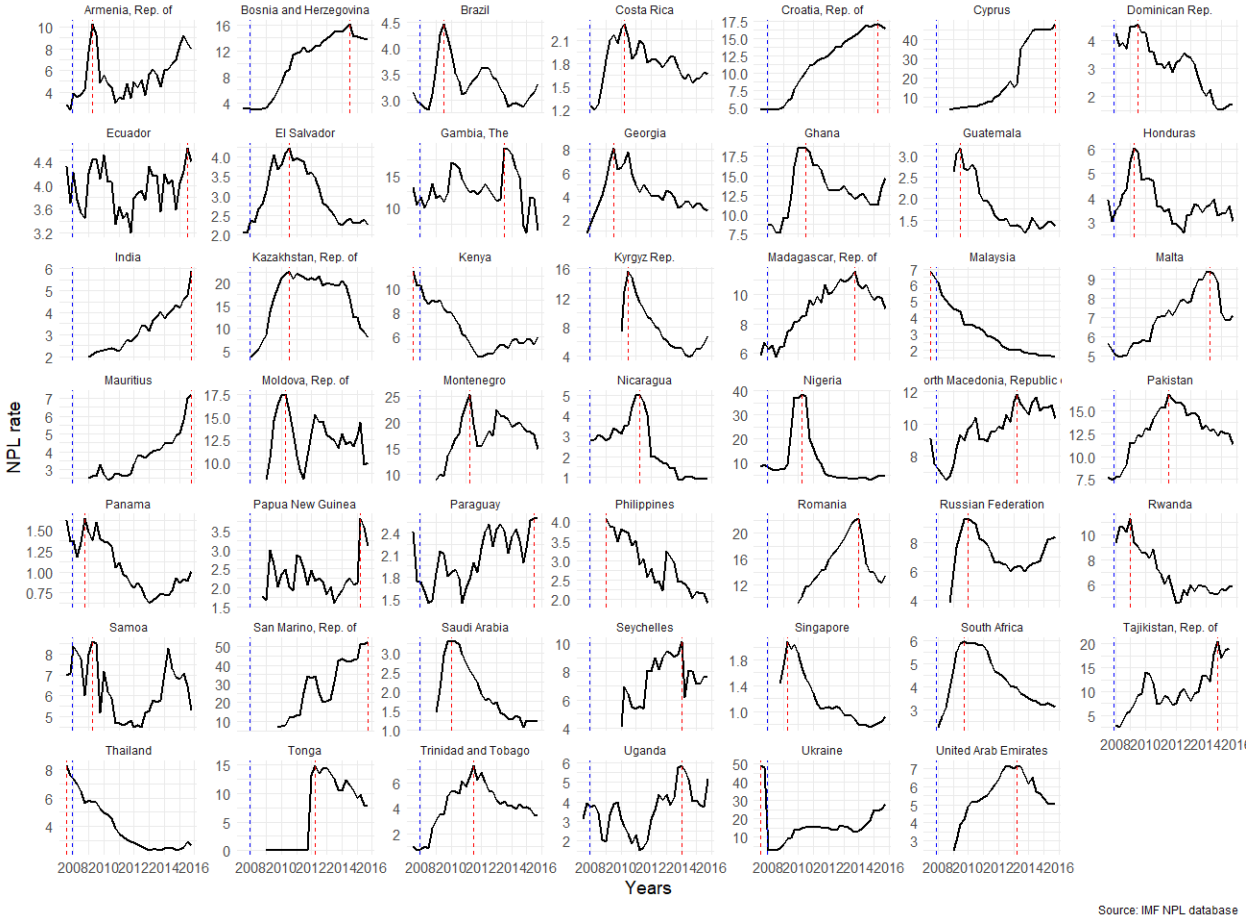
Annex 1 – List of Economies in the Global Guide

Table 1

Argentina	Guernsey	P.R. China
Armenia	Hong Kong	Romania
Australia	Hungary	Russia
Bangladesh	India	Scotland
Belgium	Indonesia	Serbia
Bermuda	Italy	Singapore
Brazil	Japan	Slovak Rep.
Bulgaria	Jersey	South Africa
BVI (British Virgin Islands)	Kenya	South Korea (Korea, Rep.)
Canada	Latvia	Spain
Cayman Islands	Lithuania	Sri Lanka
Croatia	Luxemburg	Switzerland
Cyprus	Malaysia	Thailand
Czech Rep.	Mexico	Turkey
Egypt	Netherlands	United Arab Emirates
Estonia	New Zealand	Uganda
Ethiopia	Nigeria	United Kingdom
Finland	Peru	Ukraine
France	Philippines	United States
Germany	Poland	Vietnam
Guatemala	Portugal	

Annex 2 – NPL rates in Non-OECD countries during and after the Great Recession

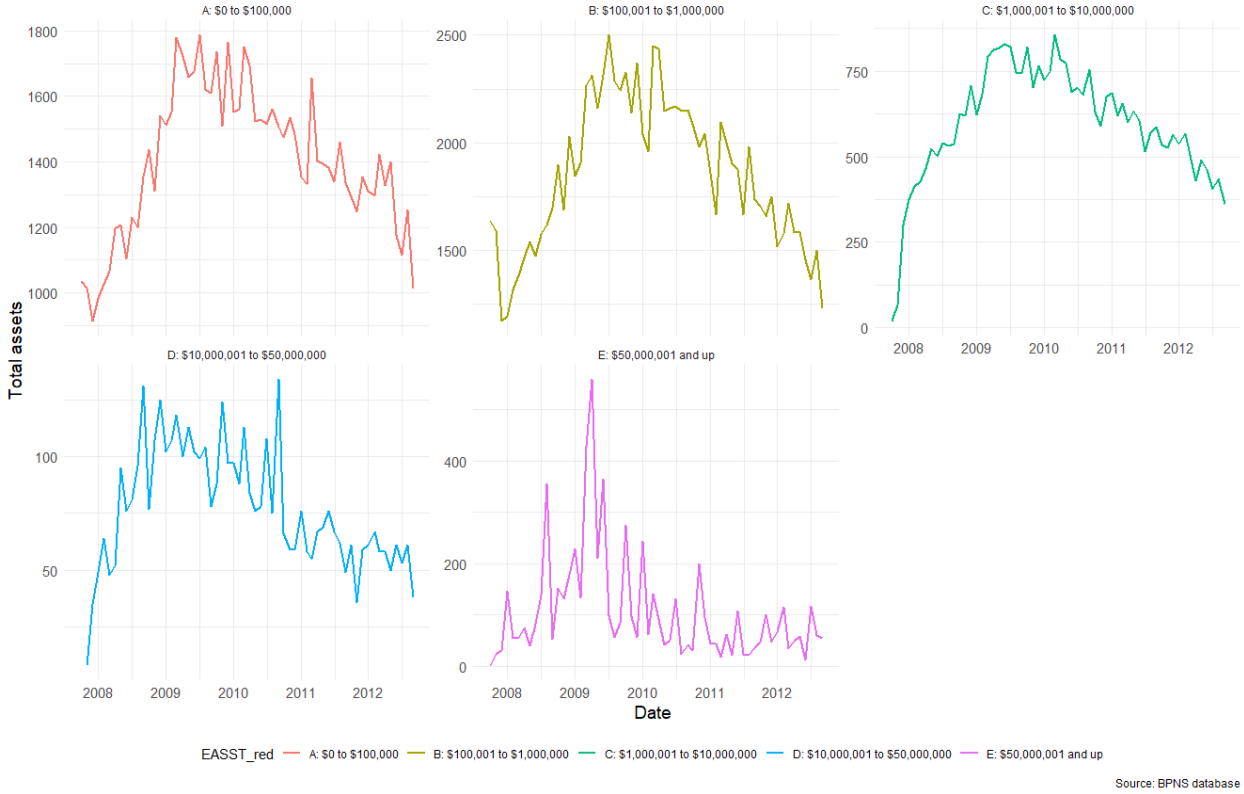
Figure 9: Non-Performing Loans (NPL) Rate in Non-OECD Countries (mid-2007 to 2015), by Quarter



Source: IMF NPL database

Annex 3 – US Business insolvency filings by size (2007-12)

Figure 10: US Business Insolvency Filings by Amount of Assets, 2007-2012



Source: BPNS database