RESEARCH INSIGHTS

How Do Aggregate Shocks Impact Firm Entry and Exit, Affecting Macroeconomic Outcomes During Recessions?

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Credit shocks and COVID-19 lockdown effects significantly impact firm entry and exit rates, more so than traditional productivity shocks. These shocks lead to substantial reductions in firm entry and increases in exits, concentrated among young and small firms.

During the Great Recession, credit constraints particularly affected young firms, reducing their entry and increasing exit rates, which contributed to slower economic recovery by limiting new business formation.

Changes in firm entry and exit accounted for 10–20% of the decline in output and hours worked during recessions, highlighting the critical role of firm dynamics in shaping macroeconomic outcomes during downturns.

CONTEXT

It is important to understand how different types of economic shocks—like credit constraints and COVID-19 lockdowns—impact firm dynamics, particularly entry and exit rates, and how these changes influence broader economic performance during recessions. The Great Recession and COVID-19 highlighted the vulnerability of young and small firms to such shocks, raising questions about the role of firm dynamics in economic resilience and recovery. By examining these effects, the study aims to provide insights into how shocks to firm entry and exit can amplify economic downturns and inform policies that support firm stability and recovery.

PROJECT

The study employs a general equilibrium model of firm dynamics incorporating financial frictions to analyze the impacts of aggregate shocks on firm entry, exit, and macroeconomic outcomes. The model integrates heterogeneous firms, endogenous entry and exit, credit constraints, and labor market dynamics. It is calibrated using U.S. Business Dynamics Statistics (BDS) data covering 1978–2018, which tracks firm births, deaths, as well as firms age and employment size. The analysis focuses on two major episodes: the Great Recession (2007–2009) and the COVID-19 pandemic lockdown (2020–2021). These events are modeled with shocks to productivity, credit, operational constraints, and labor disutility, reflecting their respective economic disruptions.

RESULTS

First, the analysis reveals that credit shocks and COVID-19 lockdowns cause more significant shifts in firm entry and exit rates than standard productivity shocks. Credit constraints limit firms' borrowing capabilities, reducing entry opportunities and prompting exits, particularly among younger firms that are more vulnerable to financing difficulties. In contrast, productivity shocks generally affect all firms more uniformly, leading to smaller changes in entry and exit.

Second, during the Great Recession, credit shocks accounted for a significant portion of the reduction in firm entry and the increase in firm exits. Young and small firms, which often rely on external financing, were disproportionately affected. This increase in exit and reduction in new business creation not only deepened the recession but also slowed economic recovery by reducing the number of productive firms re-entering the market.

Key Concept

PRODUCTIVITY SHOCK

An unexpected change in the efficiency of production, often due to technology changes or economic events, which can alter business profitability and influence economic growth.

Lastly, changes in firm entry and exit during recessions contribute meaningfully to overall economic declines. Specifically, as shown in Figure 1, reductions in entry and increases in exit collectively account for approximately 10–20% of the fall in output and hours worked during both the Great Recession and COVID-19 recession periods. This finding emphasizes the importance of firm dynamics in driving economic cycles, suggesting that policy measures to support firm entry and stability, particularly during financial and health crises, could mitigate recessionary impacts and enhance economic resilience.

POLICY IMPLICATIONS

Policymakers should consider targeted financial support programs—such as credit guarantees, low-interest loans, or deferred payment schemes—specifically tailored to young and small firms, which are disproportionately affected by credit shocks. By ensuring these firms can access essential financing, especially during economic downturns, policymakers can sustain business dynamism, which is crucial for economic recovery and innovation.

Moreover, COVID-19 lockdowns demonstrated the vulnerability of specific sectors and firm types to operational shocks. Policies that provide rapid, flexible financial relief (e.g., grants, tax deferrals, and payroll support) can help firms withstand temporary shutdowns and reduce exit rates. Such policies can preserve employment and maintain a broader base of firms ready to contribute to the recovery once the crisis abates.

The study highlights that declines in firm entry contribute to a slower recovery. Policymakers might promote entry-friendly environments by reducing bureaucratic barriers, providing incentives for new business creation, and offering support programs for start-ups post-recession. These measures help restore business dynamism and support a robust recovery by fostering job creation and productivity growth.

Key Concept

FIRM ENTRY AND EXIT

The process of new businesses starting (entry) and existing businesses closing (exit), which reflects economic dynamism. Entry typically stimulates job creation, while high exit rates can indicate economic strain.

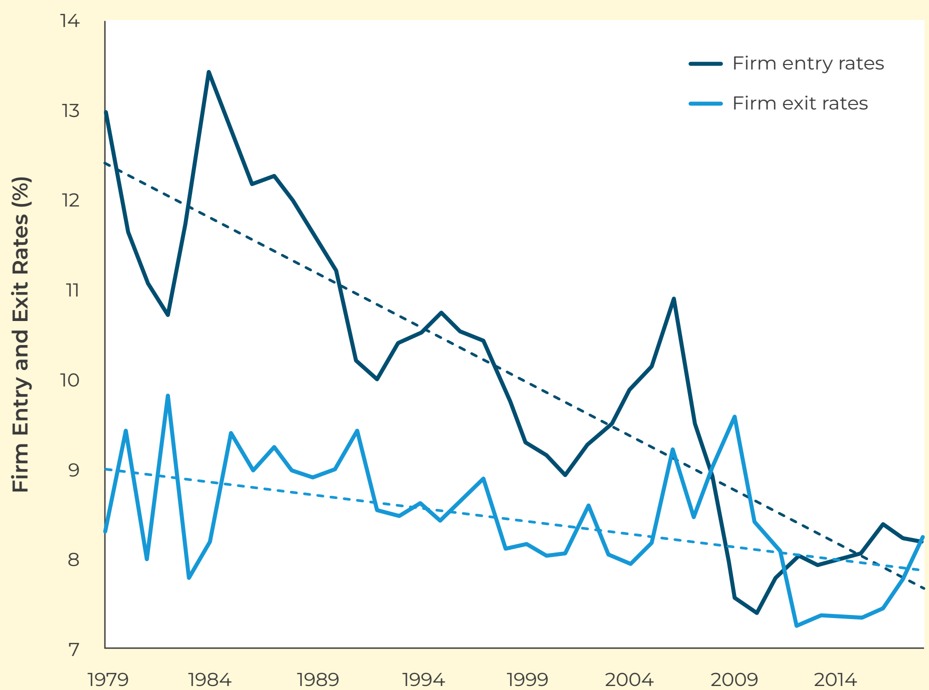
As recessions affect firm entry and exit differently based on the shock type, regulatory frameworks should incorporate flexibility to adapt to specific crises. For example, easing collateral requirements or temporarily relaxing credit restrictions for small firms during crises could allow more firms to maintain operations, ultimately supporting economic stability.

Key Concept

CREDIT SHOCK

A sudden reduction in the availability of loans, often due to economic uncertainty or financial crises, making it harder for businesses to secure funding needed for operations and growth.

FIGURE 1. Firm Entry and Exit Rates



Source: Business Dynamics Statistics (Center of Economic Studies, U.S. Census Bureau).

FULL STUDY

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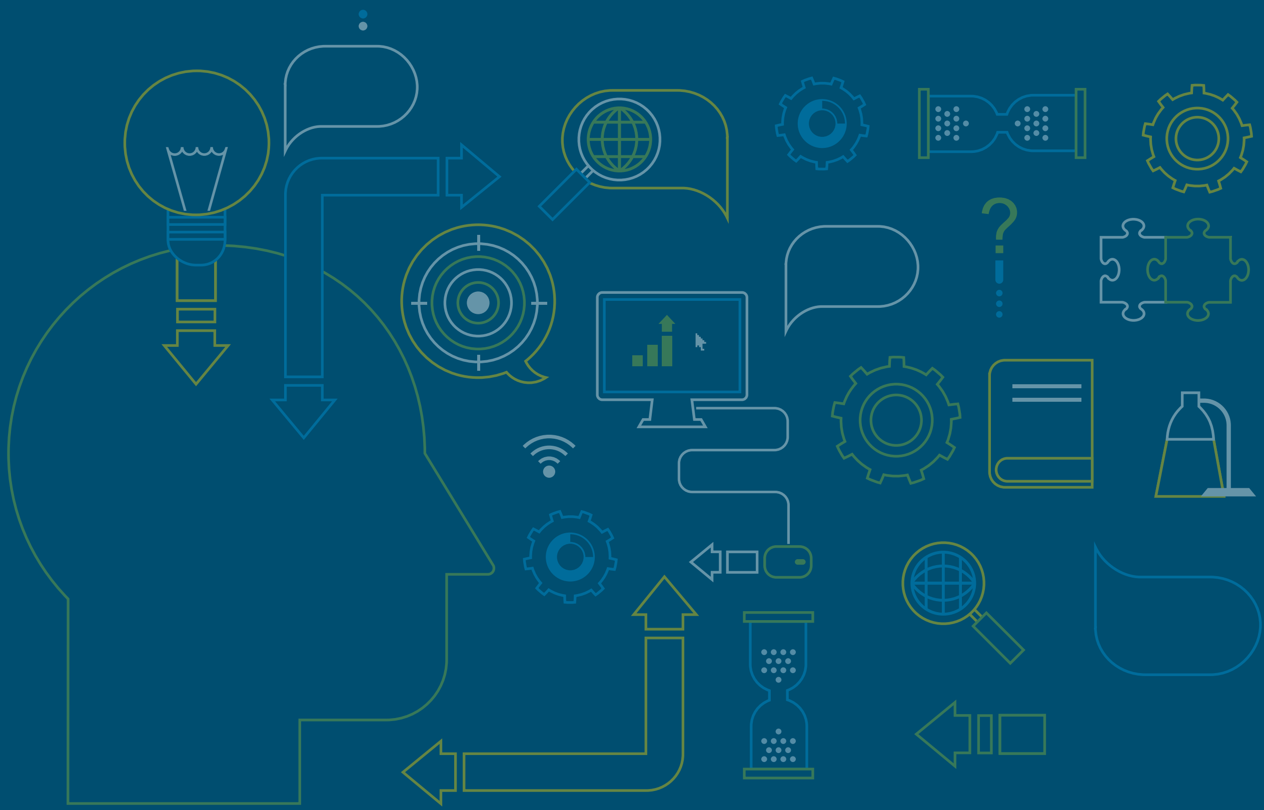

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