Mind the financing gap of intangible assets: hints on productivity and resilience

By Lilas Demmou and Guido Franco

Intangible assets are widely considered a major source of growth and resilience, also in view of their complementarity with digital technologies (Corrado et al., 2017). Yet, despite their aggregate rise in the past decades, productivity growth has been mediocre in most advanced economies. This raises questions about whether barriers to the financing of intangibles is preventing their growth potential from being fully exploited.

Typically, intangible assets have unique characteristics – uncertain returns, non-rivalry, large synergies, low redeployability – that tend to increase information asymmetries and render them difficult to collateralise. This makes their financing complex – particularly for young and small firms –and intangible investment often falls short of desired levels for a large portion of the corporate sector.

Our recent paper (Demmou and Franco, 2021) summarizes and extends recent OECD analyses exploring the extent to which financing barriers affect productivity and resilience outcomes in intangible-intensive sectors. It also proposes a cross-cutting set of financial market reforms to unlock the potential of intangible assets, which we discuss in a companion blog.

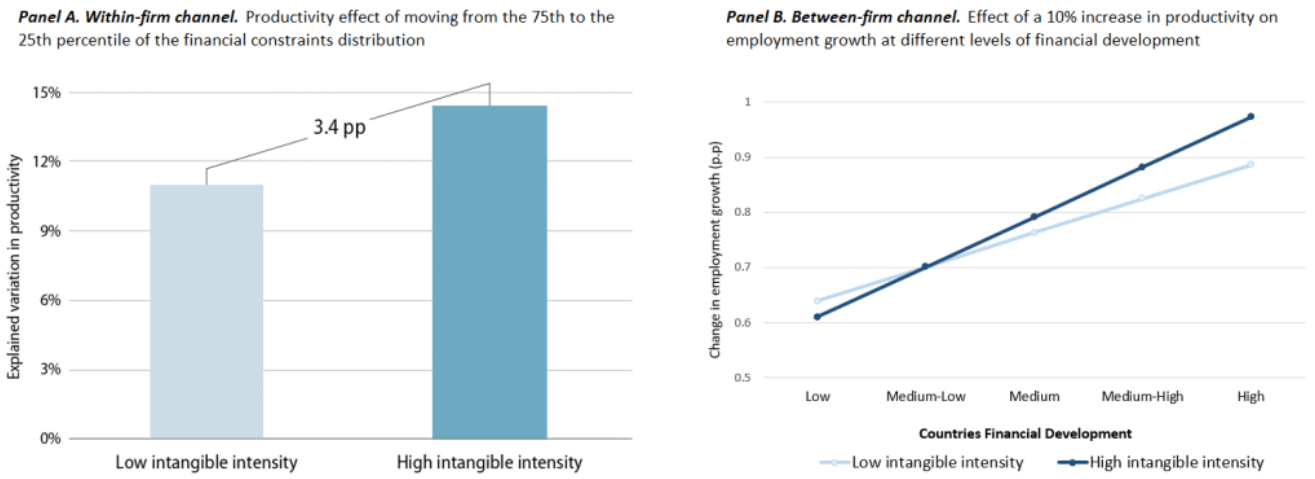
Intangible assets financing gap and productivity

Our results show that easing financing restrictions is particularly beneficial for productivity in sectors that rely more intensively on intangible assets (Demmou et al., 2019),

indirectly confirming the existence of a “financing gap” due to financial frictions. This aggregate productivity impact operates via two channels:

- The *within firm* channel operates via the ability of firms to finance their innovative projects. We show that the productivity of firms in intangible-intensive sectors benefits relatively more from sound financial conditions (Demmou et al., 2020): financing frictions explain 14% of the variation in productivity across firms in intangible-intensive sectors, against “only” 11% in traditional ones (Figure 1, Panel A).
- The *between-firm* channel pertains to the reallocation of scarce resources to underpin the growth of productive firms. We provide evidence that the virtuous impact of financial development on labour reallocation across firms is larger in intangible-intensive sectors (Demmou and Franco, 2021): moving from a low to a high financial development level could increase the efficiency of labour reallocation – as proxied by the sensitivity of firm-level employment growth to lagged productivity – by 60% in intangible-intensive sectors and by 40% in traditional ones (Figure 1, Panel B).

Figure 1: A financing gap hindering productivity in intangible-intensive sectors



Note: Panel A shows the portion of the variation in productivity explained by moving from a high (75th percentile

in the distribution of firms' financial constraints) to a low (25th percentile) level of financial constraints. Panel B presents the marginal effect of productivity on employment growth at different levels of financial development in both high (dark blue line) and low (light blue line) intangible-intensive sectors.
Source: Demmou et al. (2020), Demmou and Franco (2021).

New challenges and opportunities related to the COVID-19 outbreak

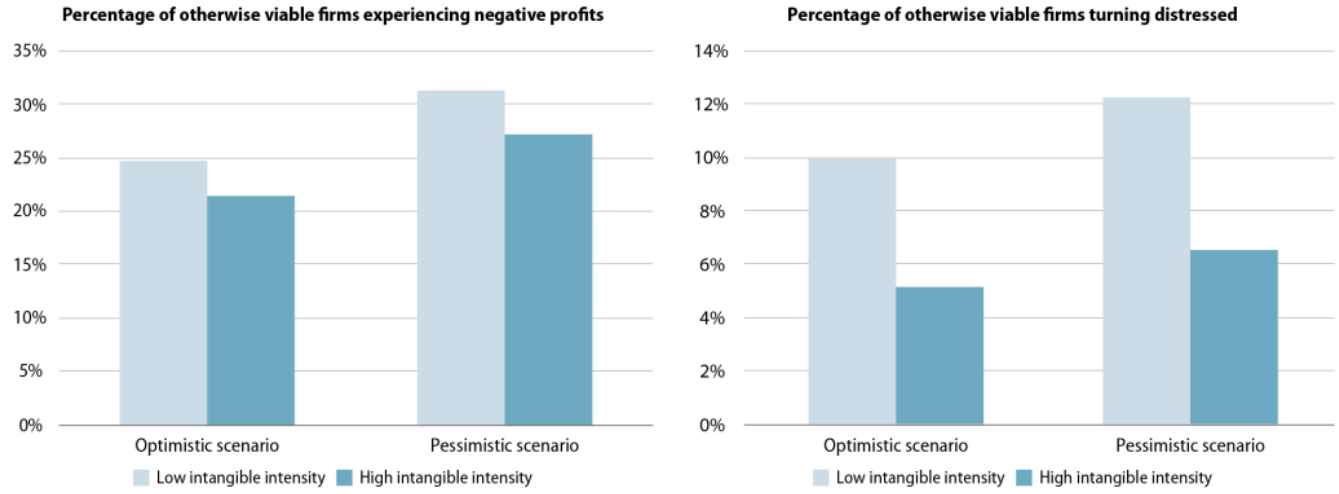
The COVID-19 outbreak generates new opportunities to harness intangible assets potential, but also increases the challenges related to their financing.

Using a simple accounting simulation model, we show that intangible-intensive firms tend to be more resilient to shocks like the COVID-19 (Figure 2). We conjecture two main reasons for this finding. First, consistent with the diverse ability to rely on innovative technologies, firms operating in intangible-intensive sectors may find it easier to adapt to the new social distancing norms that are likely to prevail in the short to medium term and facilitate the reorganisation of supply chains that have been disrupted by the crisis. Second, intangible-intensive firms tend to rely prevalently on internal funds to finance investment and thus to hold larger cash and equity buffers. As a result, they have a lower probability of becoming distressed during the COVID-19 crisis.

Yet, the same factors at the heart of this resilience could become a source of difficulties during the recovery, slowing down intangible-investment in the aftermath of the crisis. As intangible-intensive firms are using their cash reserves to cover operating expenses during the crisis and find it difficult to access external finance, they may have to reduce critical investments until they buffer again enough financial resources. This process might take time given the reduced profit streams and uncertainty around future sales. A number of theoretical and empirical studies corroborate this

narrative. For instance, when faced with financial constraints, firms cut their investment in R&D to reduce liquidity risks (Aghion et al., 2010) and, more broadly, invest less in intangibles (Garcia-Macia, 2017), especially if they are young and small (Brown et al., 2009; Hall and Lerner, 2010).

Figure 2: The impact of COVID-19 along the intangible intensity dimension



Note: Based on the accounting framework developed in Demmou et al. (2021), the figure shows the predicted impact of the COVID-19 outbreak one year after the implementation of the first confinement measures on both high and low intangible-intensive sectors. Panel A reports the percentage of otherwise viable firms experiencing losses, while Panel B the percentage of otherwise viable distressed firms (i.e., firms whose book value of equity is predicted to turn negative). The "optimistic" and "pessimistic" scenarios foresee a sharp drop in activity lasting two months, but then differ with respect to the speed of recovery in the post-confinement months.
Source: Demmou and Franco (2021).

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