



BACKGROUND NOTE

A Selective Literature Review on Fiscal Incentives to Promote Entrepreneurial Activity

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A Selective Literature Review on Fiscal Incentives to Promote Entrepreneurial Activity

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Subsidies and tax incentives are often used to promote entrepreneurial activity and thus accelerate economic development because entrepreneurship is a conduit for innovation and growth. However, as they distort the labor and capital allocation by the market, policymakers have to be cautious in using the fiscal interventions for the purpose. Common rationales for targeted subsidies of small and medium-sized enterprises (SMEs) are such benefits that SMEs potentially provide as job creation, future economic growth, and economic dynamism and flexibility. Nevertheless, they do not appear to be well-grounded in most cases (Biggs 2002). There are limited areas where the market and institutional failures exist, and thus policymakers could justify using the tools of fiscal interventions.

Access to finance is one of those limited areas where information asymmetry causes market failure, and SMEs may suffer more. Subsidies may mitigate the issue, and thus attract extra finance from private institutions. Xiang and Worthington (2017) confirmed that government financial assistance improved access of SMEs to nongovernment finance in the following year. Wu (2017) also showed that receiving subsidies for research and development (R&D) increases the likelihood that firms will raise external finance in the People's Republic of China. Using Swedish data, Meuleman and Maeseneire (2012) showed that obtaining an R&D subsidy provides a positive signal about the quality of SMEs and results in their better access to long-term finance. Subsidies can improve credit access for SMEs caused by information asymmetry. However, it should be noted that providing credit guarantee schemes, developing specialized banks for SMEs, and improving the lenders' access to the SMEs' information would be the first best solution (Yoshino and Taghizadeh-Hesary 2016).

R&D and training is another area where subsidy could be justified because of positive externalities. Cin, Kim, and Vonortas (2017) found significant positive effects of the public R&D subsidy on both the R&D expenditure and the value-added productivity of Korean manufacturing SMEs. They concluded that R&D subsidies successfully fostered technological advancement and prompted economic growth. Other studies also confirmed that public R&D subsidies show complementarity and do not crowd out private

funds in different developed economies (David, Hall, and Toole 1999; Duguet 2003; González, Jaumandreu, and Pazo 2005).

Even in the areas where financial intervention could be justified, the optimal level of support for SMEs is difficult to be quantified. If SME-targeted subsidy outweighs the disproportional impacts caused by market failures, it may increase inefficiencies. Most obviously, SMEs can be disincentivized to grow bigger as expansion leads to the termination of the SME-targeted subsidies (Biru 2014). Although adverse effects could be mitigated by design, such as gradual phasing-out (Gupta et al. 2000), finding the appropriate design is challenging partly because the actual impact of state aids and subsidies is difficult to assess (OECD 2010).

Fiscal intervention via tax treatment shares the same considerations for rationale and the scale of support that is provided. Moreover, it also requires additional considerations as it could affect the individuals' choice of risk-taking more directly. Theories suggest that the affecting mechanisms are somewhat complicated because of the asymmetry of marginal tax rate faced on positive and negative incomes, progressive tax rate, and the risk-sharing feature of taxes (Cullen and Gordon 2007). Domar and Musgrave (1944) argued that a higher tax rate with loss deductibility provides the insurance against idiosyncratic risk and thus promotes risk-taking. The tax sheltering hypothesis is another mechanism where higher tax could encourage more incorporation because a spread between personal income tax and corporate income tax may provide the tax avoidance opportunities, and thus promote risk-taking (Gordon 1998). On the other hand, with limited loss deductibility and progressivity, corporate income tax may discourage entrepreneurship as it is riskier than being employed (Gordon and Cullen 2002; Gentry and Hubbard 2000). Also, since entrepreneurial activity generates more of its returns as capital gains, lowering capital gain tax may promote entrepreneurship (Poterba 1989; Gentry and Hubbard 2005).

Empirical studies show mixed results on the relationship between tax rate and entrepreneurial activity. Early studies found a positive relationship using time series data, attributing the result to tax sheltering opportunities for the self-employed (Long 1982; Parker 1996). Following studies also confirmed this positive correlation, using cross-sectional and panel data in the United States (Moore 1983; Schuetze 2000, Bruce 2000). On the other hand, more recent studies with individual panel data revealed the opposite relationship in European countries (Fossen and Steiner 2009; Fölster 2002; Hansson 2012). Following them, Gentry and Hubbard (2005) showed that the marginal tax rate and progressivity negatively affect entrepreneurial entries in the United States, and Balliamoune-Lutz and Garelo (2014) confirmed these negative relationships in the European cross-countries. Cullen and Gordon (2007) inquired about the

dynamics of the various mechanisms through which the tax system may affect individuals' choice to become entrepreneurs. They showed that uniformly lowering personal income tax reduces risk-taking, that cutting corporate tax rate has no significant impact on entrepreneurial risk-taking, and that widening tax loss deductions boosts risk-taking. On the contrary, provided the types of entrepreneurship are considered, the corporate tax rate showed a negative relationship with innovative entrepreneurship, while income taxes have no relationship in cross-country panel data (Darnihamedani, Block, and Hessels 2018).

Overall, the literature provides general guidelines for using fiscal interventions to promote entrepreneurial activity. As most studies on subsidies agree, fiscal interventions that target SMEs can only be justified in limited areas. Further, even in such cases, quantifying the necessary scale of intervention and prospecting the actual responses of the firms to the specific incentive are quite tricky. Additionally, the empirics show mixed results on the relationship between tax schedule and entrepreneurial activity even within relatively advanced economies. The consequences of the public fiscal support significantly vary in countries, depending on institutional and cultural backgrounds. Therefore, fiscal interventions per se do not guarantee a stimulus to entrepreneurial activity. Subsidies and tax incentives, at most, could be tapped to complement the direct efforts to fix the adverse business environment for SMEs.

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