Incrementality of SME Loan Guarantees

ABSTRACT. In many countries, loan guarantee programs are important elements of government policy with respect to small- and medium-sized enterprises (SMEs). If loan guarantee schemes are to be effective, a majority of firms obtaining assistance through such a scheme ought not to be able to obtain financing from existing sources: a property known as incrementality or additionality. This paper describes a new approach to measuring incrementality. This work uses a two-stage process to estimate the incrementality of loans made under the terms of the Canada Small Business Financing (CSBF) program. First, a logistic regression-based model of loan outcomes (essentially a credit-scoring model) is estimated based on a large representative sample of SMEs. The resulting model was consistent with prior expectations and exhibited high levels of goodness-of-fit. The model was then employed to classify a sample of firms that had received loans under the terms of the loan guarantee scheme. Incremental loans ought to be classified as “turndowns” by the model; hence the proportion of loan guarantee recipients that the model classified as turndowns is a direct measure of incrementality. For the CSBF loan guarantee program incrementality was estimated (with 95% confidence) as 74.8 ± 9.0%.

KEY WORDS: additionality, incrementality, small business, loan guarantees

JEL CLASSIFICATION: G18, G28, M13, O17

1. Introduction

It is generally recognized that a substantial amount of job creation is attributable to the growth of small- and medium-sized enterprises (SMEs). While debated, many perceive this growth to be obstructed by imperfections in the credit market such that smaller firms face disproportionate access to the debt capital needed for start-up, growth, and survival (see seminal papers by Stiglitz and Weiss, 1981, 1983; Parker, 2002; Cressy, 2002 for recent reviews of this literature). To address these perceived imperfections, governments and trade associations have often intervened in credit markets using loan guarantee programs (Listeri, 1997; Levitsky, 1997a, 1997b). Listeri (1997) documents use of such schemes in most countries in South America, Europe, Southeast Asia, as well as in North America. One of the key issues with respect to debates about these interventions is the extent to which the loan guarantees provide for financing that, otherwise, would not have been available. This property of the programs is known as “additionality” in the UK and Europe and as “incrementality” in North America. The extent to which the provision of capital that is not incremental to that already available reflects “a waste of the scarce resources available to Government” (KPMG, 1999, p. 199).

This paper describes a new approach to the measurement of incrementality, specifically in the context of the Canadian loan guarantee program, the Canada Small Business Financing (CSBF) Program. The paper opens with a short description of generic features of loan guarantee programs and outlines the agency relationships among the borrowers, the guarantor, and the delivery agents. Next, a detailed description of the CSBF loan guarantee scheme is advanced because it is this program that is the subject of incrementality assessment by this paper. This is followed by a review of the literature on measurement of incrementality (additionality). The subsequent sections present the methodology and empirical findings of the analysis. The paper closes with a discussion of the implications of these findings and recommendations for future research.

2. Generic features of loan guarantee schemes

Cowling and Mitchell (2003, p. 63) have pointed out that loan guarantee schemes are “an integral
part of SME policy in both developed and developing countries” and note that “little has been done to evaluate such programmes.” All loan guarantee programs involve at least three parties: borrower, lender, and guarantor. The motives of the three participants differ. The borrower is typically an SME seeking debt capital who approaches a lender for a business loan. The lender is most often a private financial institution seeking to profit from the loan transactions. Faced with information asymmetry, lenders look for signs of creditworthiness from borrowers. For new or small businesses the high-fixed costs of evaluation may prompt the lender to refuse a loan application. Alternatively, the parties may resort to a third-party guarantee of the loan.

The guarantor, usually government or a trade association, is typically seeking to facilitate access to debt capital in the economy by providing lenders with a guarantee for some portion of the loan and (often) for accrued interest. This access to debt capital achieves economic goals such as:

1. expansion of the volume of lending to SMEs (Cowling and Mitchell, 2003),
2. increases in employment and in tax revenues from the business and its employees (Riding and Haines 2001; Bradshaw, 2002);
3. (possibly) increases in exports of goods and services (Bradshaw, 2002);
4. banks potentially profit from the development of a relationship with SMEs. Hence, guaranteed loans are sometimes used to generate new customers who may develop strong relationships with the lender and provide the lender with ancillary sources of profit from both commercial and personal banking services.

This generic arrangement implies an agency relationship between the guarantor and the lender, in addition to that between lender and borrower. The lender acts as a delivery agent of the loan guarantee for the guarantor. To accomplish its objectives the guarantor must design the parameters scheme to align its objective with the motives of the lenders (making profitable loans). In the context of this agency relationship, the guarantors can typically manage the following parameters:

1. The degree of discretion in credit decisions. In some jurisdictions the lender decides which borrowers receive guaranteed loans. In others the guarantor reviews – at least notionally – each application.
2. The level of the guarantee. This parameter also varies by jurisdiction and within jurisdictions. For example, prior to 1982 the guarantee level for US SBA loan guarantees was 90%. When the US SBA introduced its “Preferred Lender” program (for which SBA approval of a given loan was automatic) in 1982, the guarantee was reduced to 75% of the debt.
3. Fees. Typically, guarantors set fees in an attempt to recover costs of honouring defaults or to preserve the integrity of the pool of capital that, in some implementations, often lies behind the guarantees.
4. Eligibility criteria. In most implementations, guarantees may not be permitted for certain purposes of borrowing. In Canada, for example, guarantees are not available for loans used to support working capital.

These parameters vary across loan guarantee schemes according to the setting and objectives of the participants. The objectives upon which loan guarantee programs are based can differ substantially. Countries establish loan guarantee programs for a variety of reasons and the rationales impact directly the extent to which the guarantor is concerned with loan incrementality. Some countries design loan guarantee and risk sharing programs primarily to augment the financing available to small business (e.g., Canada, France, UK). In other countries, loan guarantees are designed to act as lenders of last resort, offering the loan guarantee only when SMEs fail to obtain other sources of financing (e.g., US). Some of these programs actually require that the applicant has officially been turned down for financing by commercial lenders. Other countries (e.g., Japan, see Nitani and Riding, 2005) use loan guarantees to provide funding to forestall the failure of small firms that would otherwise go under. As a result of the diversity of objectives, incrementality may be left undefined or defined in terms of program impacts according to each jurisdiction’s objectives.