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Estimating Informal Investment in Canada

Prepared for
Small Business Policy Branch
Industry Canada

by

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Canada

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ESTIMATING INFORMAL INVESTMENT IN CANADA

EXECUTIVE SUMMARY

This study has examined the extent to which data collected in the *Survey on Financing of SMEs* has contributed to the goal of measuring actual and potential informal investment in Canada. The data collected from the Survey were used to estimate the flow and potential stock of capital available for informal investment from respondents to the survey. The work has also reported on ways in which these data have improved, and can potentially yet further improve, our understanding of the flow and stock of financing beyond the estimates available in the literature.

More precisely, the data from the *Survey* indicates an annual flow of informal investment of approximately $11 billion and a stock of capital of almost $13 billion. By combining the findings from the *Survey* with findings from previous research, it was also estimated that the portion of informal investment from business angels is approximately $3.5 billion. In addition, rates of return to various categories of investor were estimated, itself an important contribution to our understanding of the informal market. Suggestive, but not conclusive, evidence was advanced that the returns on investments made by angel investors are higher than those made by non-angels, including friends and family. This finding reinforces Lerner's warnings that it may be counterproductive to the economy to encourage "amateur" informal investors.

Based on the experience of working with the *Survey* data to arrive at these estimates, limitations to the data were identified and suggestions about how to remedy the ambiguities were advanced. Additional methods that might be employed to estimate the extent of informal investment in Canada were also noted.

Overall, this work has presented ways in which the *Survey* could further enhance our understanding of the informal market, its various partitions, its stock and flow of investments, and rates of return to informal investment. With a few small changes, the information from the survey would provide reliable estimates of informal investment activity, allow for periodic assessments of activity, and provide considerable new insights. Even as it stands, it suggests that the flow of angel investment is a minimum of $3.5 billion annually and the data provide baseline estimates of love money investments from business owners.

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INTRODUCTION AND OBJECTIVES

A number of previous studies have been reported regarding the market for informal investments. While previous research has identified many of the attributes of informal investment, one among several remaining areas of uncertainty relates to the size – the flow and stock – of capital in the market for informal investment. Estimating the size of the informal market has been a problem for three reasons. First, informal investors value privacy. Consequently, there is no published comprehensive listing of informal investors. This makes it impossible to conduct either a census or true random sample. Second, definitional problems persist. For example, investments in businesses owned by friends and family ("love money") is in some research included as part of what is meant by "informal investment" and, in other research, is excluded from the definition. Third, informal investors are rare within the general population; hence use of questionnaires applied to the general population is an inefficient means of studying informal investment.

To address all of these issues, Industry Canada (working in conjunction with Statistics Canada and Finance Canada) have added questions about informal investment to the *Survey on Financing of Small and Medium-sized Enterprises* [henceforth, the *Survey*]. Because previous research has shown that many informal investors are also business owners (for example, Equinox, 2001], surveying business owners provides a potentially efficient means of addressing the difficulties mentioned above. This report outlines the findings from the initial iteration of the informal investor questions that had been included in the second version of the *Survey*. This report describes ways in which data from the *Survey* has enriched further our understanding of the size and nature of the informal investment market in Canada and outlines ways in which the *Survey* might be further improved to provide additional reliability and clarity.

Accordingly, the work described here uses data from the *Survey* as follows.

1. It estimates the flow and potential stock of capital to businesses as reported by respondents[1] to the *Survey*;

[1] Respondents to the *Survey on Financing of Small and Medium-sized Enterprises* are owners of small firms (fewer than 500 employees and less than $50 million in annual sales. As such, these respondents comprise a (probably large) fraction of the wider population of informal investors and angels.

2. The study assesses the data to estimate the levels of investment that can be attributable to sub-segments that include “angels” and also estimates investments to firms owned by friends and family.

3. The work examines the extent to which the data collected in the *Survey* contributes to measuring actual and potential informal investment in Canada by:

   a) Evaluating how these data improve our understanding of the flow and stock of financing beyond the estimates available in the literature.

   b) Identifying limitations that might exist in the interpretation of the data from the *Survey;* and,

   c) Formulating changes to the *Survey* and proposing additional approaches that might be used to estimate yet better the flow and stock of informal investment in Canada.

ESTIMATING THE FLOW AND STOCK OF INFORMAL INVESTMENTS USING THE SURVEY ON FINANCING OF SMALL AND MEDIUM-SIZED ENTERPRISES

FINDINGS FROM THE PUBLISHED DATA

The 2002 administration of the *Survey* investigated the financing experiences of Canadian business owners for the year preceding the survey. The data collection took place during the fall of 2002 by means of telephone interviews. The estimates reported by Statistics Canada in the June 2003 edition of the data tables associated with the *Survey* were based on the responses obtained from 3,850 owners of SMEs. The overall survey response rate was 66%. Sampling weights were applied in compiling the estimates so that individual enterprises in the sample were weighted according to their representation in the target population.

Estimation of Flow of Investments

Question H.7 of the Survey on Financing of Small and Medium-sized Enterprises asked respondents:

> *Excluding publicly-traded shares, mutual funds or stocks, did the majority owners of the business make any investments in any other businesses at any point since 1990?*

According to Statistics Canada, 10.8 percent of SME owners in the sampling frame reported making investments since 1990. To the respondents who answered the above question in the affirmative, Question H.8 asked

> *Approximately how many other businesses did the majority owners make new investments in [for each of the time periods: 2001, 2000, and 1990-1999]?*

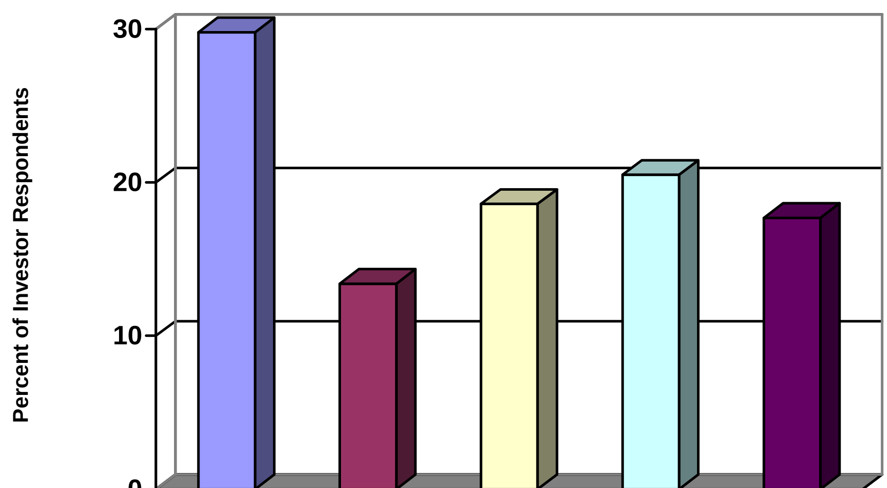
Based on responses to this question, Statistics Canada estimated that a total of 101,574 investments were made during 2001 (Table 27 of June 2003 Data Tables; 96,568 during 2000) by owners of firms that were part of the *Survey* sampling frame.

Question H.13 then asked respondents who had made investments:

> *On average, how much did the majority owners invest in these other businesses?*

and provided a series of categories of investment sizes. Figure 1 displays the relative frequency with which respondents reported average investment sizes (Table 32 of June 2003 Data Tables).

Figure 1: Average Sizes of Investments

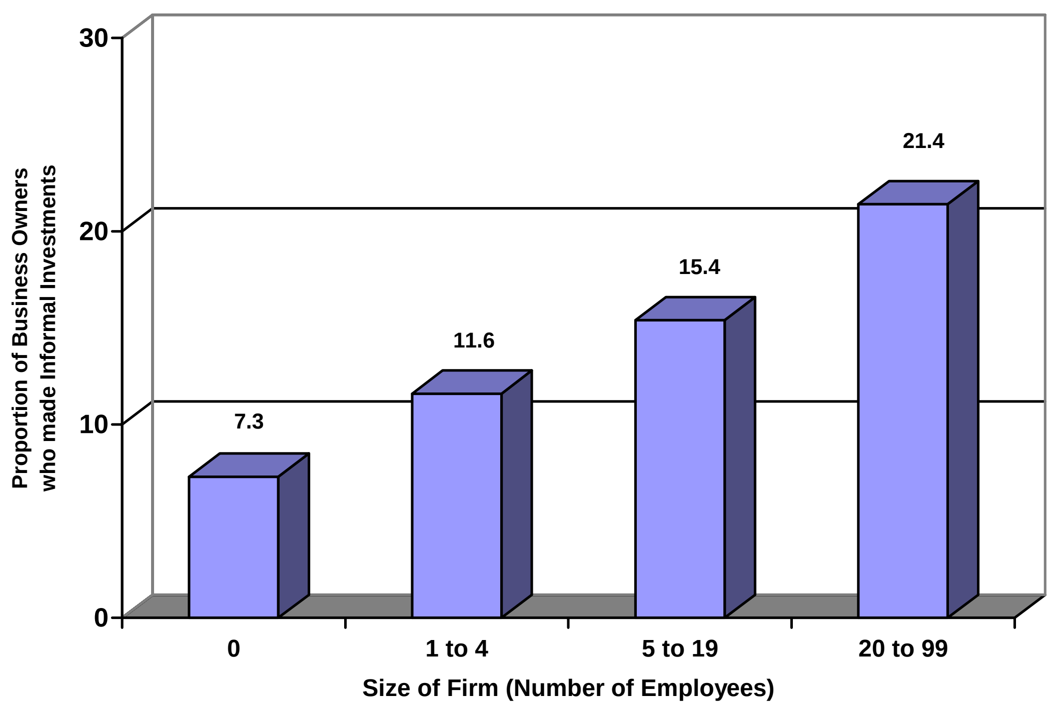


	less than $25,000	$25,000 to $49,999	$50,000 to $99,999	$100,000 to $249,999	$250,000 or more
Percent of Investor Respondents	29.8	13.4	18.6	20.5	17.7

Based on these data, the average investment by informal investors was estimated as \$111,840.[2] Given 101,547 investments during 2001 at an average size of \$111,840, a flow of \$11.4 billion for 2001 (\$10.8 billion for 2000) is implied *among owners of businesses that are consistent with the sampling frame*. Other salient findings from the Data Tables (Table 26) are breakdowns that suggest that Informal investors were more likely to be found among the owners of:

- Younger firms;
- Firms that are majority men owned;
- Older owners;
- Firms with relatively high ratios of R&D and technology investments to sales; Exporter firms (however, this may also be a manifestation of the related finding, that the likelihood of investing in another firms varies according to firm size, see immediately below).
- Larger firms (as shown by Figure 2);

Figure 2: Relative Frequency of Investing by Size of Owners' Firm



[2] This estimate uses mid-points of intervals in Figure 1 as representative of investment size categories (\$12,500 for lowest interval and \$300,000 for highest interval). As a caveat, it should be noted that use of mid-points for the middle three may lead to an overestimation of the average because doing so assumes a linear distribution of investment frequency *within* each interval. It may also be argued that there is a decreasing percentage of respondents in each class as the dollar value of investments increases. That being said, any other choice of representative value is also arbitrary.

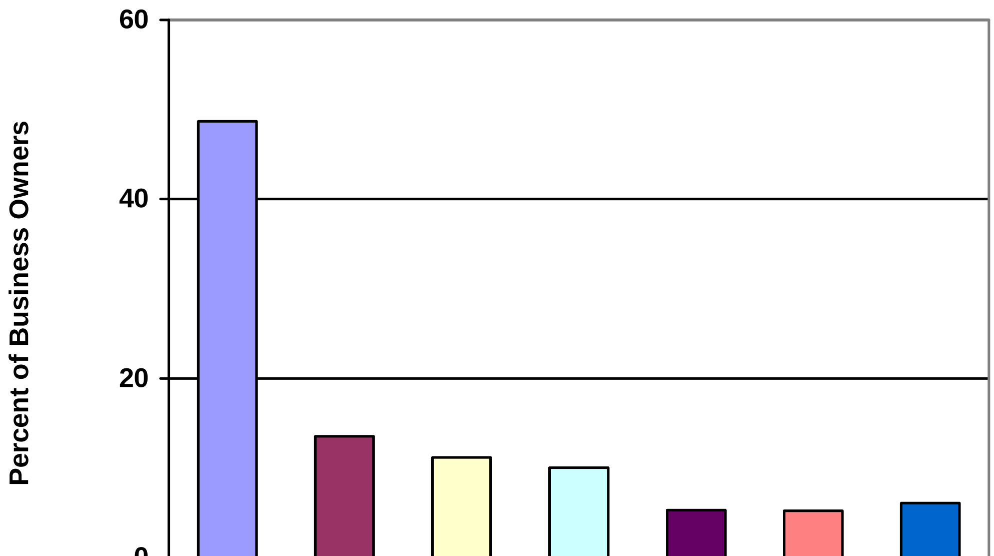
Estimating the Stock of Funds for Investments

Question H.14 of the Survey on Financing of Small and Medium-sized Enterprises asked respondents:

> *During 2001, how much did the majority owners have available to invest in other business ventures?*

The breakdown of responses to this question is shown in Figure 3. Almost half the respondents reported having less than $25,000 available; however, more than one in four respondents report having more than $100,000 available and more than one in ten report having more than $250,000. The median amount available was in the $25,000 to $50,000 range and the average amount available was $92,550.[3]

Figure 3: Breakdown of Funds Available for Investment



	less than $25,000	$25,000 to $49,999	$50,000 to $99,999	$100,000 to $149,999	$150,000 to $249,999	$250,000 to $499,999	$500,000 or more
Percent of Respondents	48.7	13.5	11.2	10	5.3	5.2	6.1

Given that 10.8 percent of the business owners in the sampling frame had made investments in other businesses (each holding an average of $92,550 available) and given that the sampling frame comprised 1,285,620 business enterprises, the available stock of capital available in 2001 is estimated as $12.85 billion.

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[3] Uses mid-points of intervals listed in Figure 3 as point estimates of funds available.

This section had focused on estimating the flow and stock of informal investments reported by *Survey* respondents. It must be emphasized that survey respondents comprise only that portion of informal investors who are also business owners, and whose businesses are consistent with the sampling frame definition. In addition, these estimates of $11.4 billion flow in 2001 and $12.85 billion stock also include investments made to firms owned by friends and family and investments in firms in which the primary owner(s) also acted as operator(s). The following section discussed how the *Survey* data might be partitioned and how future iterations of the *Survey* might be amended to clarify these ambiguities.

CONTRIBUTIONS AND POTENTIAL CONTRIBUTIONS TO KNOWLEDGE FROM THE FDI DATA

Literature reviews performed by Farrell (2000) and Equinox Management Consultants (2000) have identified several areas of knowledge that may potentially be addressed by the data from the *Survey on Financing of Small and Medium-sized Enterprises*. These include:

1. Defining better some very basic terms, such as "informal investor" and "angel". As noted, the *Survey* collects many of the salient attributes of the business owners within the "tombstone" data and investor respondents are broken down across these tombstone dimensions in Table 26. In addition, the *Survey* asks investors about whether or not they acted as operators of the firms in which they had invested (Question H.9) and whether or not they had invested in firms owned or operated by friends or family (Question H.12). Potentially, this allows for making a distinction among these categories of investee firms. As the *Survey* questionnaire now stands, however, it is not possible to draw an unambiguous distinction. Farrell (2000, p. 35) discusses this topic in some depth.

2. Measuring, reliably, attributes of informal investments and the size of the informal marketplace.

3. The role of "love money". Often excluded from research on informal investment, love money is thought to comprise a significant portion of financing for new firms.

4. Measuring realized rates of return on informal investment. There is simply no data about the rates of return informal investors have realized. Previous research has reported the rates of return informal investors seek, but there is virtually no information regarding actual rates of return. Again, this is discussed in greater depth in Farrell (2000, pp. 30-31).

The following sections do not comprehensively address all of these questions; rather they illustrate how the Survey data can potentially be used to address these topics as a basis for discussion and for future steps. Before the *Survey* can be used more reliably, there remains the need to undertake small revisions to the questionnaire so that ambiguities may be reduced.

TYPOLOGIES OF INFORMAL INVESTORS AND THE SIZE OF THE INFORMAL MARKET

Typically, informal investors are defined as individuals who invest their own funds at arm's length in a business owned and operated by a third party. The terms are typically used interchangeably: for example Farrell (2000, p. 10) asserts that "angels are individuals who engage in informal investing." As discussed by Farrell (2000), a variety of attempts have been made to classify angels or informal investors on the basis of either personal attributes, behavioural characteristics, or according to the nature of their investment activity. There is not only no consensus on which classification scheme to use, it is also debatable whether making such classifications is even possible. Categorizing investors by the nature of their investments is unlikely to be fruitful. This is because the categories that have been advanced are not always mutually exclusive. For example, business angels may invest not only at arm's length, but also may make one or more investments in businesses owned by friends or family.

This problem of categorization exacerbates the difficulty of measuring the size and scope of the informal market. As both Farrell (2000) and Equinox (2000) note, as yet there are no reliable measures of the size and scope of the informal market[4] and the estimates so far reported here represent only the *Survey* sampling frame. This is not only a problem in Canada, but one that faces researchers in all countries. The nature of the informal investment process is such that:

- Informal investors are usually defined to invest in businesses owned by individuals who – at the outset – are not friends or family; however, nothing prevents informal investors from also investing in businesses owned by individuals who – at the outset – are friends or family. Many investors are likely to invest both love money and arm's length financing.

- The same investors may invest in the businesses owned by unrelated third parties and report as such at the time they were surveyed; however, if the survey had been administered at a later date, the business founders may have become friends. Hence the survey response may depend on timing of the survey.

Consequently, so-called "love money" is often included as part of the informal market (for example, this is typical of the studies published annually by the Global Entrepreneurship Monitor). Farrell (2000, p. 35) calls for additional research on love money and states that is a largely neglected aspect of SME financing, both points being well-taken. In the context of the *Survey*, this raises the opportunity to separate "love money" from arm's length investments. Certainly love money is important from the perspective of both the recipients of financing as well as from the financing provider. For example, Lerner (1998, as reported in Equinox, 2000, p. 25) raises an important issue that gives some food for thought. SMEs, particularly start-ups, are inherently risky and there is considerable uncertainty regarding their survival and growth. Lerner suggests that it is counterproductive to the economy "to

[4] Historically, the role of angels was at one time "thought to be insignificant" (Farrell, 2000, p. 14). A variety of estimates of the flow of informal investment have been hazarded raging from "less than $100 million" (Doyle, 1997) to as amounts that exceed the flow of formal venture capital (Suret et al., 1995, as reported by Farrell, 2000, p. 14).

encourage amateur individual investors." Lerner poses the question: "What type of investors are we encouraging? What type of funds are we attracting?" These are important questions that relate to the role of "love money". The *Survey* data potentially allow for both the separation of love money from arm's-length informal investments.

In addition, analysis of the 2001 data allows further insights by allowing for breakdowns of the investor respondents according to the direction of their investments. Specifically, the survey asked investors if they were acting as operators (Question H.9)[5] of the business in which they had invested.[6] Respondents who answered Question H.9 'no' would have been acting as passive investors. Those who answered 'yes' may have been either:

- investors who were taking on an active role in operating investee firms (this is not unusual for angel investors); or,
- investors may have been serial entrepreneurs proceeding to their next project; or,
- may have been family members acting as operators by virtue of being part of the family.

This is somewhat clarified by responses to Question H.12. As a result, four categories of informal investor can be discerned:

1. those who did not invest in businesses owned by friends and did not act as operators in the businesses in which they invested (these are almost certainly angel investors);
2. those who did not invest in businesses owned by friends but did act as operators in the businesses in which they invested (some of these may be angels who are heavily involved in the firms);
3. those who invested in businesses owned by friends and did not act as operators in the businesses in which they invested (some of these may have been angels who also invested in family-owned or family-operated firms);
4. those who invested in businesses owned by friends and who acted as operators in the businesses in which they invested (some of these may have been angels who also invested in family-owned or family-operated firms).

Table 1 presents the breakdown of these categories of investors as estimated from the sampling frame. The results suggest that a minimum of 13.9 percent of investor respondents invested at arm's length and took on passive roles, almost certainly angels. In addition, however, it is known that angels also frequently take on active roles in the firms in which they invest and that they may also invest in family firms. Consequently, some (unknown) portion of the 37.5 percent of investors who did not invest in firms owned by friends and

[5] Question H.9: *Did the majority owners act as operators in these other businesses?*

[6] Question H.12: *Were these other businesses owned or operated by family or friends?*

family were also angels; however, it is also likely than some of these individuals were serial entrepreneurs or operators of multiple businesses. Future versions of the *Survey* need to be amended so as to help distinguish among these groups and gain a yet more precise estimate of angel activity.

Table 1 shows that almost three of four investors took on active roles in the firms in which they had invested. Table 1 also shows that almost half of the informal investors who responded to the survey invested in businesses owned by family members or friends. Among these, it is possible that some investors became friends with the founders of the businesses in which they invested subsequent to having made the investment, but prior to responding to the survey. These, too, may have been angel investors but future versions of the *Survey* might usefully be amended to take account of this possibility in order to estimate the proportion of angel investors more precisely. Accordingly, the 13.9 percent of investors who *did not* invest in firms owned by friends or family and who *did not* act as operators must be regarded as a very conservative estimate of angel investors with the sampling frame employed for the *Survey.*

Table 1: Types of Informal Investor

	Invested in businesses owned by family, friends?		**Total**
Acted as operators in investee firms?	**Yes**	**No**	
Yes	34.7%	37.5%	**72.2%**
No	14.0%	13.9%	**27.8%**
Total	**48.7%**	**51.4%**	**100.0%**

There is suggestive, but not statistically significant, evidence that the first category of informal investors ("probable angels") invested more frequently and in larger amounts than did investors among the other categories. These findings are listed in Table 2A.

Table 2A: Investment Activity by Informal Investor Grouping

Invested in businesses owned by family, friends	Acted as operators	Average Number of investments in 2001	Average Number of investments in 2000	Average investment in other businesses	Average Funds Invested in 2001
No	**No**	**1.33**	**1.56**	**$124,830**	**$166,024**
Yes	**No**	**0.50**	**0.33**	**$105,135**	**$52,568**
No	**Yes**	**0.75**	**0.82**	**$105,058**	**$78,794**
Yes	**Yes**	**0.72**	**0.60**	**$116,710**	**$84,031**

Aggregate Investment Activity by Category of Investor

Based on these data, it would appear that business owners in the first category ("probable angels") makes more frequent, and larger, investments than investors among the other groupings. As a result, the total amount of funds invested is also greater. However, it should be noted that the relatively small numbers of investors in each category are such that these differences are not statistically significant. Accordingly, a larger sample would be required to determine if these differences are attributable to sampling error or not and this is recommended for future iterations of the *Survey*. Table 2A also allows for a breakdown across the four categories of investors of the aggregate amounts invested for the business owners that comprise the sampling frame for the *Survey*. This breakdown is shown in Table 2B.[7]

Table 2B: Aggregation of Investment Activity by Informal Investor Grouping

Invested in businesses owned by family, friends	Acted as operators	Average Number of investments in 2001	Number of Investors in 2001	Average investment	Funds Invested ($billion)
No	**No**	**1.33**	**18,668**	**$124,830**	**3.09**
Yes	**No**	**0.50**	**18,449**	**$105,135**	**0.97**
No	**Yes**	**0.75**	**50,505**	**$105,058**	**3.98**
Yes	**Yes**	**0.72**	**46,721**	**$116,710**	**3.92**

In addition, investors in the first category (probable angels) also differ significantly from investors in the other groups in that they reported having significantly more funds available "to invest in other business ventures" (average of $140,500 for probable angels vs. $119,700 for aggregate of other groups).

INFORMAL INVESTORS AND REALIZED RATES OF RETURN

While previous research has reported the rates of return informal investors *seek*, there is virtually no information regarding *actual* rates of return. Again, this is discussed in greater depth in Farrell (2000, pp. 30-31) but the "bottom line" is that there is simply no data about the rates of return informal investors have realized in Canada – or elsewhere. The *Survey* includes questions to business owner respondents that potentially add to our knowledge about realized rates of return. The Survey asks respondents who had reported having made investments if:

> *(Question H.10): the majority owners sold any of these shares in these other businesses obtained since 1990?" For the subset who responded that they had sold shares,*[8]

Question H.11 asked those who had responded in the affirmative:

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[7] Note that amounts may vary slightly from those reported previously because not all investors responded to all questions and the weighting scheme used to adjust for the stratification of the sample can exacerbate these differences.

[8] 26.7 percent of respondent owners reported having sold shares of the businesses in which they had invested since 1990.

> *"What was the average rate of return on these shares that were sold?"*

Table 3 shows the breakdown of the responses to Question H.11 across the four categories of investor defined in the previous section. Even though the number of respondents was low, investors in the first category ("probable angels") were significantly less likely to lose money on their investments and significantly more likely to earn high returns than were investors in the other categories.

Table 3: Rates of Return by Category of Informal Investor

Rate of Return	Invested at arms length, did not act as operator	Invested in friends, family, did not act as operator	Invested at arms length, acted as operator	Invested in friends, family, acted as operator
Lost money	26.7%	62.4%	50.2%	47.3%
1% to 50%	40.7%	25.8%	38.8%	37.0%
More than 50%	32.6%	11.8%	11.0%	15.7%

Assessment of the Survey on Financing of Small and Medium-sized Enterprises for Estimating the Stock and Flow of Informal Investments

The *Survey on Financing of Small and Medium-sized Enterprises* holds great promise as a means of addressing several of the substantive questions about the Canadian market for informal investment. With some minor changes, it can provide, with precision, aggregate informal investment stock and flow estimates from investors within the *Survey* sampling frame. In addition, the preceding sections have illustrated how the data can be used to gather disaggregated estimates of stocks, flows and returns to particular groupings of investment activity, including love money.

Collectively, the business owners within the sampling frame were estimated to have made more than $11.4 billion in informal investments during 2001 and to be holding almost $13 billion. Of these, the business owners within the sampling frame who invested at arm's length in firms in which the investor did not act as operator accounted for $3.1 billion during 2001 (26 percent of the total). This represents an absolute lower limit of informal angel investment made during 2001. This is a lower limit because it does not include investments made by angels who were not part of the SME owner sampling frame, owners who invested in firms owned by friends or family but who were also angels, and owners who acted as operators but who were also angels.

As noted, however, the preceding sections have provided information with respect to informal investing *undertaken by business owners who qualified for the Survey* sampling frame. The respondents therefore are necessarily a subset of the population of informal investors and include individuals who invested in family businesses and who invested in firms in which they were actively involved as operators. However, these results can be used to arrive at an estimate of angel activity in the wider population. What the results show is that the proportion of business owners who are informal investors (P(A/B)) is 10.8 percent. In addition, previous research has found that a high proportion of angels are business owners. Equinox (*Patterns and Practices of Informal Investors*, 2001) found that approximately 91 percent of the investors who participated in that study (sampling frame based on nomination from CCIP site managers) were business owners (that is, P(B/A)=0.91). Therefore, probability theory dictates that the overall proportion of investors in the general population (P(A)) is (0.11/0.91 = 12 percent) of the proportion of business owners in the general population. Finally, it appears that a minimum of 13.9 percent of informal investors are business angels. It follows mathematically that the proportion of angel investors in the general population is a minimum of 1.65 percent of the number of business owners in the general population. This results in an estimate of $3.5 billion per year as a minimum threshold for the annual overall flow of angel investment.

It is understood that Statistics Canada's *Survey of Financial Security* now includes a question that will allow for a more accurate distinction between angel investors who are business owners and those who lie outside the FDI *Survey* sampling frame. This will permit an improved overall estimate by measuring directly the proportion of the general population who are business owners and the proportion of the general population who have made informal investments. These results, once available, would allow a fairly precise extrapolation of the estimates based on the data from the *Survey on Financing of Small and Medium-sized Enterprises.*

Also, of the $11.4 billion in informal investments made by owners within the sampling frame, approximately one-half of the *number* of investments (and approximately 41 percent of the *value* of the investments, about $4.9 billion) was directed to businesses owned or operated by family and friends, "love money". It is likely that some unknown portion of this total was invested by angels in firms where the original founders of the firms were not friends at the time of investment but may have become friends by the time the *Survey* questionnaire was administered. Future iterations of the *Survey* might usefully be revised to address this distinction so as to further improve estimation of the structure of the informal market.

The data also suggest that business owners within the sampling frame invested an aggregate of almost $4.0 billion in firms that were not owned or operated by friends or family but in which the investors also acted as operators. Again, future iterations of the *Survey* might usefully be revised to understand better the nature of these investments and what proportion of these were angel investments.

Finally, it is important that one additional element of the survey be revised in future iterations. Specifically, the survey is ambiguous whenever investors had made more than one investment (occurred approximately 67 percent of the time). All investor respondents, including those who had made multiple investments were asked the following sequence of questions:

> *H.9 Did the majority owners act as operators in these other businesses?*

H.10 Have the majority owners sold any of these shares in these other businesses obtained since 1990?

H.11 What was the average rate of return on these shares that were sold?

H.12 Were these other businesses owned or operated by family or friends?

H.13 On average, how much did the majority owners invest in these other businesses?

For owners who had made multiple investments, it is not clear which investee firms among the "other businesses" were the subject of these questions. Conceivably, a respondent may have acted as an operator of one investee business, but not in other investees; likewise, an owner might have invested in one firm owned by family but at arm's length in another instance. Hence, this series of questions needs to be made more specific (perhaps to the 'most recent investment' or 'the initial investment', etc.) As it stands, it is not clear which of the multiple investments since 1990 formed the basis of respondents' answers to questions H.9 through H.13.

One way of dealing with this ambiguity might be to revise the above series of questions along the following lines:

1 *How many investments in other firms did the primary owner of this business make during (name a time period of interest)*

   a. *Of these, how many were invested in firms that were - at that time - owned or operated by family or friends?*

      i. *What was the average amount invested in these firms owned by family or friends?*

      ii. *Did the majority owners act as operators in these other businesses?*

      iii. *Have the majority owners sold any of these shares in these other businesses owned by family or friends?*

      iv. *What was the average annualized rate of return on these shares that were sold?*

2 *Of the <investments reported in 1>, how many were invested in firms that – at that time – were NOT operated by family or friends?*

      i. *What was the average amount invested in these firms owned by family or friends?*

      ii. *Did the majority owners act as operators in these other businesses?*

      iii. *Have the majority owners sold any of these shares in these other businesses owned by family or friends?*

      iv. *What was the average annualized rate of return on these shares that were sold?*

SUMMARY AND DISCUSSION

This study has examined the extent to which data collected in the *Survey on Financing of SMEs* has contributed to the goal of measuring actual and potential informal investment in Canada. The data collected from the Survey were used to estimate the flow and potential stock of capital available for informal investment from respondents to the survey. The work has also reported on ways in which these data have improved, and can potentially yet further improve, our understanding of the flow and stock of financing beyond the estimates available in the literature.

More precisely, the data from the *Survey* indicates an annual flow of informal investment of approximately $11 billion and a stock of capital of almost $13 billion. By combining the findings from the *Survey* with findings from previous research, it was also estimated that the portion of informal investment from business angels is approximately $3.5 billion. In addition, rates of return to various categories of investor were estimated, itself an important contribution to our understanding of the informal market. Suggestive, but not conclusive, evidence was advanced that the returns on investments made by angel investors are higher than those made by non-angels, including friends and family. This finding reinforces Lerner's warnings that it may be counterproductive to the economy to encourage "amateur" informal investors.

Based on the experience of working with the *Survey* data to arrive at these estimates, limitations to the data were identified and suggestions about how to remedy the ambiguities were advanced. Additional methods that might be employed to estimate the extent of informal investment in Canada were also noted.

This work could not address potential investment by individuals who had not previously made informal investments. The *Survey* questions about informal investment were posed only to those business owners in the sampling frame who had reported already having made informal investment. Potential informal investment from other sources might be gauged in future iterations of the *Survey* by asking business owners if they had previously *considered* making informal investment and why (if they had previously considered it) they had not made informal investment.

Future work could usefully be focused in two directions. The first is to obtain updated and yet more precise estimates of the proportion of angels investors who are business owners. The 91 percent figure used here was based on a relatively small sample and one obtained from a single means of sourcing investors. Potentially, the National Angel Organization could be helpful here as well as the *Survey of Financial Security*. The second direction is to refine the questions regarding informal investment posed on the *Survey of Financing of SMEs* along the lines suggested here.

Overall, this work has presented ways in which the *Survey* could further enhance our understanding of the informal market, its various partitions, its stock and flow of investments, and rates of return to informal investment. With a few small changes, the information from the survey would provide reliable estimates of informal investment activity, allow for periodic assessments of activity and provide considerable new insights. Even as it stands, it suggests that the flow of angel investment is a minimum of $3 billion annually and the data provide baseline estimates of love money investments from business owners.