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The Economic Contributions of Florida's Small Business Development Centers to the State Economy

An Analysis Performed by

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Preface

The Florida Small Business Development Center Network was created in 1976 and is organized as a public, not-for-profit agency partially funded by the U.S. Small Business Administration and administered by the University of West Florida. Federal funding accounts for half, or less, of all Small Business Development Center funding. Foundations, area chambers of commerce, and economic development corporations also contribute to SBDC programs. For training sessions, registration fees typically apply.

The purpose of this study, commissioned by the Florida Small Business Development Center Network and performed by the Center for Economic Development Research, College of Business Administration, University of South Florida, is to quantify the economic contributions of the Small Business Development Centers to the State of Florida.

The Center for Economic Development Research provides information and conducts research on issues related to economic growth and development in the Nation, in the state of Florida, and particularly in the central Florida region. The Center serves the faculty, staff, and students of the College of Business Administration, the University, and individuals and organizations in the University's service area. Activities at the Center for Economic Development Research are designed to further the objectives of the University and specifically the objectives of the College of Business Administration.

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EXECUTIVE SUMMARY

This is a report of the findings of analysis of economic contributions of Small Business Development Center (SBDC) clients in Florida during 2001. Florida's Small Business Development Centers seek to link public and private resources with entrepreneurs in order to assist small business growth and prosperity.

Based on data provided by the Florida Small Business Development Center Network and Florida's Covered Employment and Wages program, the weighted-average money wages for workers in SBDC-supported jobs were \$31,159. Additionally, using a regional economic model, we estimate statewide total output per SBDC-supported job at \$70,675 for 2000. The findings are:

Sales

- SBDC clients reported average annual sales of \$409,238 during 2001.
- The 95% confidence interval for total annual sales for the 8,393 SBDC clients ranges between \$2.27 billion and \$4.59 billion during the same time period.

Employment

- On average, 5.46 employees worked at SBDC-clients during 2001.
- Total employment for the 8,393 SBDC clients ranges between 36,888 and 54,717 during the same time period, based on a 95% confidence interval.

Wages

- Annual money wages paid by SBDC-supported clients averaged \$31,159 during 2001.
- The sum of all money wages paid by SBDC-supported clients during the same time period ranges between \$1.14 billion and \$1.71 billion, based on a 95% confidence interval.

Capital Formation

- Businesses supported by SBDC activities obtained an average of \$8,467 in loans during 2001.

Multiplier Effects

- Each job created by SBDC-supported businesses results in another 0.6250 indirect and induced jobs.
- Each dollar of labor income paid by SBDC businesses results in an additional \$0.70 of indirect and induced labor income.
- Each dollar of output produced by SBDC clients generates an additional \$0.78 of indirect and induced output.

Introduction

Thirty-two Small Business Development Centers (SBDCs), connected via the Florida Small Business Development Center Network, operate within Florida. The mission of the network is to “link the resources of the federal, state and local governments, as well as the private sector, to provide entrepreneurs with the one-on-one counseling, management training and information they need to prosper and grow in a complex and competitive global economy.” The centers provide counseling and training events to established and pre-venture entrepreneurs.¹ The purpose of this report is to estimate the economic contributions of Florida’s SBDCs.

Brief History of Small Business Assistance in the United States

The Small Business Administration (SBA) traces its roots to the Reconstruction Finance Corporation (RFC), launched during the Hoover Administration. The RFC loaned funds to businesses, large and small, adversely impacted by the financial crisis of the Great Depression. During WWII, Congress created the Smaller War Plants Corporation (SWPC) in order to encourage small business participation in the war effort. The SWPC “provided direct loans to private entrepreneurs, encouraged large financial institutions to make credit available to small enterprises, and advocated small business interests to federal procurement agencies and big businesses.” Following the war, the SWPC was dissolved, its lending and contract capabilities shifted to the RFC. Concurrently, the Office of Small Business (OSB) of the Department of Commerce undertook the training and counseling activities characteristic of today’s SBA. During the post-war boom, momentum gathered to dismantle the RFC. President Eisenhower proposed creation of a new federal agency to continue the lending and educational services of the RFC and OSB. The Small Business Act of July 30, 1953 created the Small Business Administration, “whose function was to ‘aid, counsel, assist and protect, insofar as is possible, the interests of small business concerns.’”² The charter also stipulated that the SBA would ensure small businesses a ‘fair proportion’ of government contracts and sales of surplus property.”² In 1976, the SBA funded eight SBDC pilot programs to assist the education and development of entrepreneurs and the small business community. Florida’s SBDC Network was one of these original eight, starting with two centers in its first year of operation. Since then, the Florida SBDC Network has counseled over 250,000 entrepreneurs and small business owners, answered over 1.4 million requests for information, and led over 450,000 participants through more than 20,000 training events.

¹ Florida Small Business Development Center Network. *What We Do*. Retrieved June 11, 2003 from <http://www.floridasbdc.com/AboutUs/WhoWeAre.asp>

² U.S. Small Business Administration. *Overview & History of the SBA*. Retrieved June 24, 2003 from <http://www.sba.gov/aboutsba/history.html>

Methodology

Each of the thirty-two SBDCs maintains a database of its clientele. Within these databases, the SBDCs record certain proprietary (gross sales and employment) and non-proprietary (location of business, primary SIC³, etc.) information. The proprietary information is reported via voluntary survey, resulting in incomplete data within a large percentage of the database. We examined the available data to obtain the sample statistics to generate estimates for the 8,393 clients served in 2001. Additionally, we created “low” and “high” estimates (based on a 95% confidence interval) of an estimated population mean. Finally, we entered the employment figures provided by the SBDC into the IMPLAN™ input-output model to estimate the direct, indirect, and induced contributions of Florida’s SBDCs on the state’s economy.

SBDC clients fall into one of two categories, “operating,” and “pre-venture.” In this report, we refer to the operating clients, and present information regarding the potential economic impact of pre-venture firms supported by SBDC activities in **Appendix A**.

Employment and Wages

In 2001, according to data provided by the Florida SBDC Network, Floridian SBDCs played a role in the creation or maintenance of 3,127 jobs at 573 establishments. This amount projects to an estimated 45,803 jobs for all of the 8,393 clients. Assuming that the wages paid at jobs supported by the SBDC follow a similar distribution as jobs in the economy as a whole, then the 573 establishments paid out over \$97 million in money wages, based on an average annual wage of \$31,159 per SBDC-supported job. Thus, the estimated aggregate wages paid by the 8,393 clients equal just over \$1.42 billion.

Table 1 displays the average annual wages by 1-digit SIC, as well as the contribution from industry division to the total.

³ The Standard Industrial Classification (SIC) is a system developed by the U.S. government to classify industries.

Table 1
Jobs and Wages Supported by SBDC Activities 2001

1st Digit of SIC	Description	Number of Workers	% of SBDC Jobs	Average Annual Wage
0	Agriculture, Forestry, and Fisheries	14	0.47%	\$ 19,200
1	Mining and Construction	369	12.50%	\$ 34,263
2 & 3	Manufacturing	322	10.91%	\$ 40,280
4	Transportation, Communication, and Utilities	4	0.14%	\$ 41,457
5	Trade	776	26.28%	\$ 25,057
6	Finance, Insurance, and Real Estate	6	0.20%	\$ 47,951
7 & 8	Services	1,421	48.14%	\$ 31,441
9	Public Administration and Non-Classifiable	40	1.36%	\$ 38,047
Weighted Average				\$ 31,159

Source: Florida SBDC Network; Florida Research and Economic Database, Covered Employment and Wages

The greatest percentage of jobs supported by SBDC activities, 48.14%, was in the Services division of the economy. Also, 10.91% of SBDC-supported jobs were in the Manufacturing division of the economy, whereas only 6.51% of all Florida jobs were in this sector. Manufacturing jobs are considered to drive economic development through exports.

Finance, Insurance, and Real Estate, as well as Transportation, Communication, and Utilities accounted for less than one-fourth of one percent of SBDC-supported jobs during 2001. However, these two industry divisions had the highest average annual wages, \$47,951 and \$41,457, respectively.

Table 2 compares the percentage of jobs by industry division for SBDC clients and for Florida's economy.

Table 2
Percentage of Jobs by Industry Division 2001

Industry Division	SBDC Clients	Florida
Agriculture, Forestry, and Fisheries	0.47%	2.38%
Mining and Construction	12.50%	5.78%
Manufacturing	10.91%	6.51%
Transportation, Communication, and Utilities	0.14%	5.75%
Trade	26.28%	24.96%
Finance, Insurance, and Real Estate	0.20%	6.31%
Services	48.14%	42.30%
Public Administration and Non-Classifiable	1.36%	6.01%

Source: Florida SBDC Network; Florida Research and Economic Database, Covered Employment and Wages

SBDC-supported jobs are more prevalent, in terms of a percentage, than jobs in Florida within the following divisions: Mining and Construction,

Manufacturing, Trade, and Services. In the remaining divisions of the economy, SBDC-supported jobs are less prevalent, again in terms of a percentage.

Sales

Of the 8,393 operating clients assisted by Floridian SBDCs in 2001, 221 identifiable firms provided sales data. The sales figures submitted by these firms show that SBDC activities supported an average of \$409,238 in sales per client. This average, if applied to all firms supported by SBDC activities, results in annual firm sales of over \$3.43 billion.

Capital Formation

We can also measure the business activity of Florida's SBDCs by the value of loans obtained by SBDC-supported businesses. Of the 3,180 identifiable firms in the sample, 2,953 (92.9%) reported no loans. The remaining 227 firms (7.1%) reported that they obtained loans totaling \$26.9 million during 2001, yielding for the 3,180-firm sample an average of \$8,467. Applying this average to the population of 8,393 firms results in an aggregate of just under \$71.1 million dollars in raised capital.

Contribution Analysis

Table 3 shows the sample size ("Clients Reporting"), sample mean, and low and high estimates of the population mean for sales, employment, and wages. These means were then multiplied by 8,393 to obtain three estimates of the totals: "Total," "Low Total," and "High Total."

**Table 3
Summary Statistics for Florida's SBDC-Supported Businesses 2001**

	Sample Averages			
	Clients Reporting	Mean	Low*	High*
Sales	221	\$ 409,238	\$ 271,306	\$ 547,170
Employment	573	5.46	4.40	6.52
Wages	573	\$ 31,159	\$ 30,989	\$ 31,328
Capital Formation	3,180	\$ 8,467	\$ (8,224)	\$ 25,157

	Population Estimates			
	Total Clients	Total	Low Total*	High Total*
Sales	8,393	\$ 3,434,737,876	\$ 2,277,074,273	\$ 4,592,401,479
Employment	8,393	45,803	36,888	54,717
Wages	8,393	\$ 1,427,164,366	\$ 1,143,139,960	\$ 1,714,215,686
Capital Formation	8,393	\$ 71,060,813	\$ 26,924,030 [#]	\$ 211,142,030

* 95% Confidence Interval; # In this case, applying the lower bound of the confidence interval would have returned a negative, and impossible, estimate. Therefore, the verified amount was used as the lower bound of the population estimate.

Source: Florida SBDC Network; Florida Research and Economic Database, Covered Employment and Wages

Per client sales of \$409,238 extrapolate to total sales of \$3.43 billion for the 8,393 clients. We estimate the true total sales for all SBDC clients to be between \$2.27 billion and \$4.59 billion. From the 573 clients reporting employment data, we estimate a range of 36,888 to 54,717 employees for the total client base, with total wages ranging from \$1.14 billion to \$1.71 billion. We estimate the total amount of capital obtained by SBDC-supported businesses ranges from \$26.9 million to \$211.1 million.

Brief Description of Input-Output Modeling

In the previous sections we reported the direct effects of Florida's SBDCs. In this section, we include the measures of the indirect and induced economic contributions (the multipliers, or "ripple effects") of the direct effects. Of the 8,393 operating clients serviced by Florida SBDCs in 2001, 299 identifiable firms provided sufficient SIC and employment information. IMPLAN™ calculates direct, indirect, and induced effects of the input variable (in this analysis, jobs), using 2000 as the baseline year. We use the model to apply the "counter-factual approach" by virtually removing the direct employment effects from the Florida's economy. When jobs are put into the model, a table of output per worker (by sector) is generated. In input-output analysis, indirect effects are the inter-industry effects and induced effects are the impacts of household expenditures.

There are two steps in impact analysis using the input-output (I-O) model. First, the descriptive model is created; then, the predictive model is derived from the descriptive model. The descriptive model contains information about interindustry transactions called the regional economic accounts. The information describes the flow of dollars from purchasers to producers within the region. In addition to the regional economic accounts, the descriptive I-O model includes the social accounts. Social accounting data include, for example, taxes paid by businesses and households to government, and transfer payments from government to businesses and households. Trade flows also are a part of the social accounts. The regional economic accounts and social accounts are used to build multipliers. The multipliers are the predictive I-O model. A multiplier is the expected change in output for each industry in the model given a one-dollar change in final demand for any particular industry or commodity. A multiplier measures the effects of a change in final demand(s) in a region. The change in economic activity is called the impact. In this study, using the "counter-factual approach," the impact measures the economic contribution of the Florida SBDC Network.

Economic Contribution of Florida's SBDCs

We examined three measures of economic contribution: Employment, Labor Income, and Output. Employment is a measure of the number of jobs supported by SBDC activities. Labor Income is comprised of Employee Compensation and Proprietor Income (payment received by self-employed

persons as income, as reported on federal income tax forms). Output measures the dollar value of production by the job holders.

Table 4 summarizes the economic contributions of Florida's SBDC-supported firms.

Table 4
Economic Contributions

Employment	Model Estimates	Implied Multiplier
Direct	45,803	1.0000
Indirect	9,907	0.2163
Induced	18,717	0.4087
Total	74,430	1.6250
Labor Income		
Direct	\$ 1,312,445,555	1.0000
Indirect	\$ 364,234,680	0.2775
Induced	\$ 564,111,480	0.4298
Total	\$ 2,240,791,748	1.7073
<i>Average Total Labor Income per job - \$30,106</i>		
Output		
Direct	\$ 2,939,899,670	1.0000
Indirect	\$ 853,743,312	0.2904
Induced	\$ 1,466,715,953	0.4989
Total	\$ 5,260,358,969	1.7893
<i>Average Total Output per job - \$70,675</i>		

Note – Due to rounding, the listed total may deviate from the sum of the listed components of the total.

During 2001, SBDC activities supported an estimated 45,803 jobs. Using 2000 as the baseline year, the model predicts these jobs generated an estimated 28,624 indirect and induced jobs. These direct jobs resulted in over \$1.31 billion in labor income, along with \$928.34 million in indirect and induced labor income. Total output associated with SBDC clientele was over \$5.26 billion, \$2.32 billion of this due to indirect and induced output.

Fiscal Contributions

In addition to the economic contributions previously listed, businesses supported by SBDC activities contribute to Florida's economy through the taxes they pay, as well as the taxes generated by indirect and induced effects. At the state and local level, we estimate the total amount of taxes generated by SBDC-supported businesses at over \$261 million dollars during 2001.

Table 5 displays the breakdown, by source, of estimated taxes generated by SBDC-supported businesses during 2001.

Table 5
Estimated State and Local Tax Revenues
Generated from SBDC-Supported Businesses

Source of Tax	Estimated Amount
Employee Compensation	\$ 3,525,958
Household Expenditures	\$ 10,257,313
Corporations	\$ 4,740,080
Indirect Business Taxes	\$ 243,094,263
Total	\$ 261,617,614

Note: the amounts listed estimate the total (direct, indirect, and induced) tax impact

Of the \$261 million dollar tax impact created by Floridian SBDC-supported businesses, the overwhelming percentage (92.92%) comes from indirect business taxes. Indirect business taxes include excise, sales, and property taxes. Fees paid and licenses obtained as a result of normal business operations are also categorized as indirect business taxes. Employee compensation taxes (1.35% of the tax impact) are paid by employers and employees for social insurance programs. Household expenditures are personal taxes (property taxes, licenses, fines, and fees) and represent 3.92% of taxes generated by SBDC-supported businesses. The remainder of this tax impact, 1.81%, comes from taxes on corporate profits and dividends.

Conclusions

In 2001, Florida's SBDCs supported \$1.31 billion dollars in direct labor income and \$2.24 billion dollars in total labor income. Total output, the sum of direct, indirect, and induced output, stemming from SBDC-supported businesses was \$5.26 billion dollars. As a percentage of 2001 Gross State Product (GSP), output produced by SBDC-supported businesses accounted for 1.07% of Florida's \$491.48 billion GSP.⁴ Additionally, SBDC clients generated an estimated \$261 million in state taxes.

During 2001, Florida's SBDCs logged an estimated 48,349 hours assisting small businesses. Each hour of counseling provided to clients can be linked to the creation or maintenance of approximately 1.5 direct, indirect and induced jobs, and thus over \$46,384 in wages associated with those jobs. A significant percentage (10.91%) of SBDC-related jobs are in the Manufacturing division of the state's economy. Manufacturing jobs are typically considered primary jobs, meaning that they attract development, rather than respond to development. Primary jobs lead to the creation of secondary jobs, usually in the Service division of the economy.

⁴ U.S. Bureau of Economic Analysis. *Gross State Product by Industry for 2001*. Retrieved January 29, 2004 from <http://www.bea.gov/bea/newsrel/gspnewsrelease.htm>

Recommendations

In order to obtain further and more accurate insights into the economic contributions of SBDCs in the state of Florida, additional and more complete information is needed. SBDC activities should collect sales and employment data from all clients. Inclusion of North American Industrial Classification System (NAICS) codes⁵ of client-firms will enhance the precision of researchers' estimates of employment, wages, and output.

⁵ The North American Industrial Classification System (NAICS) replaced the SIC in 2001.

Appendix A – Potential Economic Contributions of Pre-Venture SBDC Clientele

Many businesses take advantage of SBDC services prior to commencing operations. These firms, classified as “pre-venture,” do not generally have employees or sales. We applied the sample means obtained in the previous analyses of clients operating in 2001 to the 4,981 clients classified by SBDC databases as pre-venture during that year to generate estimates of the potential economic contributions of Florida’s SBDC pre-venture clients.

Table 1A displays the estimated summary statistics for pre-venture clients.

Table 1A
Summary Statistics of Florida's SBDC Pre-Venture Clients 2001

	Total Clients	Estimates		
		Total	Low Total*	High Total*
Sales	4,981	\$ 2,038,414,478	\$ 1,351,375,186	\$ 2,725,453,770
Employment	4,981	27,196	21,916	32,476
Wages	4,981	\$ 155,202,979	\$ 154,356,209	\$ 156,044,768
Capital Formation	4,981	\$ 42,174,127	\$ 2,120,300 [#]	\$ 125,307,017

* 95% Confidence Interval; # In this case, applying the lower bound of the confidence interval would have returned a negative, and impossible, estimate. Therefore, the verified amount was used as the lower bound of the population estimate.

Source: Florida SBDC Network; Florida Research and Economic Database, Covered Employment and Wages

Table 2A displays the potential economic contributions of the pre-venture clients.

Table 2A
Potential Economic Contributions

	Model	Implied
Employment	Estimates	Multiplier
Direct	27,196	1.0000
Indirect	5,882	0.2163
Induced	11,115	0.4087
Total	44,194	1.6250
Labor Income		
Direct	\$ 778,898,047.12	1.0000
Indirect	\$ 216,162,628.51	0.2775
Induced	\$ 334,783,662.80	0.4298
Total	\$ 1,329,844,358.01	1.7073
<i>Average Total Labor Income per job - \$30,106</i>		
Output		
Direct	\$ 1,744,744,460.42	1.0000
Indirect	\$ 506,671,683.20	0.2904
Induced	\$ 870,453,015.83	0.4989
Total	\$ 3,121,869,179.62	1.7893
<i>Average Total Output per job - \$70,675</i>		

Note – Due to rounding, the listed total may deviate from the sum of the listed components of the total.

Table 3A displays the estimated potential tax impact of pre-venture SBDC

clients.

Table 3A
Estimated Potential State and Local Tax Revenues
Generated from Pre-Venture SBDC-Supported Businesses

Source of Tax	Estimated Amount
Employee Compensation	\$ 2,092,553
Household Expenditures	\$ 6,087,415
Corporations	\$ 2,813,099
Indirect Business Taxes	\$ 144,269,334
Total	\$ 155,262,401

*Note: the amounts listed estimate the total
(direct, indirect, and induced) tax impact*