# Financial development and occupational choice: Evidence from India

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## Abstract

Theory suggests that capital market frictions might inhibit entrepreneurship, and that financial market development is likely to be associated with an increase in self-employment. But what are the effects of increasing access to finance in developing countries where the bulk of the self-employed work in micro-enterprises? Evidence from a large survey of over one million randomly selected Indian households suggests that opposite effects may be observed in developing countries where workers work in household enterprises that do not pay a regular salary. Access to finance eases credit constraints for the formal sector, creating job opportunities that move workers out of self employment into formal sector jobs. Examining survey data on more than 400,000 firms in the service sector in India, which has experienced high growth in the last two decades, we find that firms located in districts with greater access to finance, borrow more. Access to finance is also associated with increased productivity, wages, and, employment, with the effects concentrated in larger firms, and firms located in urban areas. Our results describe a mechanism by which financial development facilitates economic growth and reduces poverty: by moving workers out of micro-enterprises and self-employment into more productive employment in the formal sector.

Keywords: Financial development; Occupational Choice; Entrepreneurship

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## 1. Introduction

Schumpeter (1912) contended that well-functioning banks spur technological innovation by identifying and funding those entrepreneurs with the best chances of successfully implementing innovative products and production processes. A number of studies, conducted mainly in developed countries, confirm Schumpeter's argument, indicating a positive correlation between access to finance and entrepreneurship (see for example, Evans and Jovanovic, 1989, King and Levine, 1993, and, Black and Strahan, 2002, among others). But what are the effects of easing financial constraints in developing countries where micro-enterprises in the informal sector provide employment for the bulk of the labor force?

Theory suggests that financial constraints should affect employment since firms rely on working capital to finance labor costs; there are adjustment costs to hiring and firing workers; and, due to capital labor complementarities in the production function (Benmelech, Bergman, and Seru, 2011). Relatedly, Pagano and Pica (2012) develop a model showing that the effect of access to finance on employment may also vary cross-sectionally. In their two-sector model, financial development allows more profitable firms to attract more workers by bidding up wages, inducing labor reallocation from the weaker to the stronger sector. Which effect dominates remains an empirical question because it may depend on the institutional and economic characteristics of the country. While in developed countries we may observe an increase in entrepreneurship in response to improved access to finance, what are the effects in a developing country where the majority of the self-employed are employed in micro-enterprises?

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To examine this question, we use data from two rounds of the Employment-Unemployment Survey (1999 and 2004) conducted by the National Sample Survey (NSS) Organization, which surveys over 1.2 million nationally representative Indian households. We supplement the study of individuals with two nationally representative surveys of over 1.2 million service sector firms also conducted by the NSS to examine the relationship between firm-level employment and access to finance.

To capture access to finance, we use the number of government bank branches and credit extended by government banks at the district level in India from 1991. Prior to 1991, banks were required to obtain a license from the central bank before opening a new branch (Burgess and Pande, 2005). In 1977, the central bank introduced a new licensing policy to target unbanked rural locations. According to this act, a bank could only obtain a license to open a branch in an already banked location if it also opened branches in four unbanked locations, what is commonly referred to as the 1:4 licensing policy. The goal of this policy was to open bank branches in the most populated regions that were not serviced by banks. This policy was discontinued in 1990, and the new policy stated that bank branch location would be based on the "need, business potential, and financial viability of the location" (Government of India, 1991).

To minimize the potential endogeneity of bank branch location to individual and firm level characteristics, we use data on government bank branches at the district level in 1991. Using the presence of government banks in 1991 reduces the potential for endogenous bank entry based on unobservable district-level characteristics, which may be correlated with household occupational choice and firm level employment decisions. As noted earlier, the location of government bank branches in India prior to the reforms was



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based on population and the existing presence of lending institutions in a region. Since our dependent variables are from 1999 and 2004, using banking sector data from 1991 also minimizes the possibility of reverse causality, where bank entry may be driven by district level characteristics such as the extent of household entrepreneurship in that district.

The results from the household data suggest that an increase in the number of bank branches in a district is associated with a significant decrease in the probability of being an employer in a household enterprise. For example, the mean number of government-owned bank branches in a district is associated with a 2% decrease in the probability of being a household employer in that district, relative to the underlying mean of an 18% probability of being an employer in a household enterprise. We also find that in districts with more government bank branches, the probability of being self-employed or an employer of a household enterprise is significantly lower for more educated individuals. The results also suggest that the likelihood of being the employer of an enterprise employing 6 or more workers is significantly lower in districts with more bank branches. The regressions control for individual characteristics, including age and gender, district level population, and, industry and state fixed effects.

The nature of the household firm may provide an explanation for these results. In many developing countries such as India, household enterprises offer subsistence employment in the absence of formal employment opportunities.[2] For example, the average household firm in our data employs 1.4 workers, and only 0.6% of households employed in these micro-enterprises report wages. It may be the case that access to finance

[2] The informal or unorganized sector is defined by the Government of India as "…all unincorporated private enterprises owned by individuals or households engaged in the sale or production of goods and services operated on a proprietary or partnership basis and with less than ten total workers," (NCEUS, 2008).

increases employment opportunities in the formal sector, shifting workers out of irregular employment in the informal sector into salaried positions. Consistent with this hypothesis, we find that an increase in the number of government bank branches in a district is associated with a significant decline in the likelihood of being employed in a household enterprise, and increases the likelihood of employment in the formal sector. For example, the mean number of government-owned bank branches in a district is associated with over a 7% decrease in the probability of being employed in a household firm in that district, , relative to the underlying mean of 12.4%.

Examining if there is a corresponding pattern for wages, the results show that, on average, wages are higher for workers employed in formal sector firms located in districts with more access to finance. For example, the mean number of government-owned bank branches in a district is associated with an average increase in wages of about 4% in that district, where average annual wages are about INR 30,000 or about $685 at 1999 exchange rates. For the small fraction of household firms reporting wages, there appears to be a slight increase in wages paid to workers, but not entrepreneurs.

We also examine the probability of being unemployed, or being a student enrolled in an educational institution, based on access to finance in that district. While the likelihood of being unemployed is not significantly different, the likelihood of being a student increases significantly, in more financially developed districts. The mean number of government-owned bank branches in a district is associated with a 12% increase in the likelihood of being a student in that district, relative to the underlying mean of 18%. The latter result suggests that access to finance may increase investments in human capital because of

either an increase in disposable income for households, or more job opportunities for educated workers.

We supplement the analysis by examining firm-level loans, employment, productivity, and wages using survey data on the service sector in India. These data cover 440,000 firms that operate in a broad range of service activities. Since the service sector is one of the fastest growing sectors in India, it offers a unique opportunity to examine the role of financial development in facilitating growth. Another critical advantage of focusing on service sector firms is that the rapid growth in this sector was unanticipated prior to the economic reforms, reducing the potential for endogenous location of bank branches to the future characteristics of service sector firms in that region.

The firm-level data on the service sector provide an in-depth view of the role of finance in firm employment decisions. The results suggest that firms borrow more in districts with more government bank branches, indicating that financial development eases financial constraints. We also find that larger firms and those located in urban areas borrow more, which may be because these firms are more credit worthy, have access to better information, or face better growth opportunities. Greater access to finance in a district is also associated with significant increases in employment, wages, and value added per worker in firms located in those districts. These effects appear to be larger for firms that employ more workers, and firms located in urban areas.

Our study is related to the large literature on the effects of bank branch deregulation and access to credit. A recent paper by Chodorow-Reich (2014) examines the effect of bank lending frictions on employment outcomes exploiting the pre-crisis relationship of firms with banks, and, using the Lehman collapse as an exogenous shock to the financial health of

lenders. The study finds that firms that had pre-crisis relationships with less healthy banks reduced employment more compared to clients of healthier lenders. Evidence also suggests that bank entry may affect firms' access to credit (Petersen and Rajan, 1995; Beck, Demirguc-Kunt, and Maksimovic, 2004), economic growth (Jayaratne and Strahan, 1996; Cetorelli and Gambera, 2001), and, entrepreneurship (Black and Strahan, 2002). Our study suggests that access to credit as captured by bank branches, is also associated with a shift in the occupational choice of individuals in the labor market, which has potentially important implications for both economic growth, and the labor market decisions of firms and workers.

Our paper also contributes to the literature on financial development and growth. A now widely accepted argument, proposed by Goldsmith (1969), McKinnon (1973), and Shaw (1973), and supported by a growing empirical literature on this topic suggests a first-order relationship between financial market development and economic growth (see for example, Rajan and Zingales (1998) and Gupta and Yuan (2009) for industry-level evidence, and, Bekaert, Harvey, and Lundblad (2005) for country-level evidence). Although the preponderance of the macroeconomic evidence suggests that financial market development promotes economic growth, the channels by which growth occurs remains a matter of considerable debate. Our results contribute to this debate by suggesting a mechanism by which improved access to credit may facilitate growth: allowing formal sector firms to expand employment, become more productive, and, pay higher wages, moving workers out of less productive subsistence employment into wage employment in the formal sector. For example, Jiang and Townsend (2007) examining Thai firms show

that 73% of total factor productivity growth is explained by occupational shifts and financial deepening due to expansion of credit.

A related strand of literature examines the relationship between access to credit and poverty. Examining the effect of bank branch expansion on rural poverty, Burgess and Pande (2005) show that poverty declined significantly in areas where there was bank branch expansion. Bruhn and Love (2014) consider the effects of expanding lending to a targeted group of underserved, low-income individuals, through bank branch expansion, and find that this credit expansion is associated with an increase in the number of informal businesses, but no change in the number of formal businesses. While they examine the effects of expanding lending to a targeted group of low-income individuals, our results focus on overall access to credit, not targeted towards a specific group. Our results suggest that an overall expansion in credit through financial institutions may facilitate growth in the formal sector, but not necessarily in the informal sector.

Our results do not imply that all microenterprises are unproductive. For example, De Mel, Mckenzie and Woodruff (2008) examine the effect of randomized grants to a set of Sri Lankan microenterprises, and show that average real return to capital in these enterprises is between 4.6% and 5.3% per month, and, Mckenzie and Woodruff (2008) examine returns to capital amongst the smallest urban microenterprises in Mexico and estimate returns to capital of about 15% per month. Since we consider an expansion in formal credit and not targeted lending as in these other studies, our results suggest that increased access to credit for formal sector firms may shift workers away from microenterprises that provide subsistence employment.

The remainder of the paper is organized as follows: Section 2 describes the data, Section 3 describes the main results from the Employment-Unemployment surveys; Section 4 describes the results from the Service sector surveys; and, Section 5 concludes.

## 2. Data sets and data description

### 2.1 Employment- unemployment surveys

The National Sample Survey Organization (NSSO), a division of the Ministry of Statistics and Program Implementation of the Government of India, conducts national surveys on the employment and unemployment status of a large sample of households every five years. Given the timing of our data on banking and credit activities, we use rounds 55 and 61 of these surveys, conducted in 1999 and 2004 respectively. The 1999 survey was the first nation-wide survey of the informal sector. These surveys of households engaged in non-agricultural activities in the informal sector covers household enterprises in manufacturing, construction, trading and repair services, hotels & restaurants, transport, storage and communications, financial intermediation, real estate, renting and business activities, education, health and social work and other community, social & personal service sectors. Appendix Table A1 describes the industry breakdown of household firms in the Employment-unemployment survey. For further details on how the survey is conducted see NSSO (2000).

The NSSO describes the informal sector as follows: "The informal sector may be broadly characterized as consisting of units engaged in the production of goods and services with the primary objective of generating employment and incomes to the persons concerns. These units typically operate at a low level of organization, with little or no division between labor and capital as factors of production and on a small scale," (NSSO, 2000). Household enterprises are

further defined as "units engaged in the production of goods or services, which are not constituted as separate legal entities independently of the households or household members that own them, and for which no complete sets of accounts are available which would permit a clear distinction of the production activities of the enterprises from the other activities of their owners (NSSO, 2000). We note that activities performed by household enterprises in the informal sector are not necessarily performed with the intention of evading taxes, and hence are distinct from the underground economy. In contrast, the formal sector is characterized as firms that are registered entities, and for which statistics are available regularly from budget documents and reports. Formal sector firms include government-owned firms and private firms.

The set of questions we examine regarding work status pertain to those in the non-agricultural sector. For these workers, the survey records their usual work status during the reference period of the preceding year. These divide into workers working within household enterprises (either as the sole worker, as an employer, or as a paid or unpaid employee), as wage or regular salaried workers (hence outside the household – either in private enterprises or public entities), or as casual or unpaid workers (again, in private firms or public entities). We code those who normally work in one of the previous activities but are not doing so at the time of the survey due to sickness as belonging to their usual category.

We define an individual as a Household enterprise employer (*Household Enterprise Employer*) if the individual is recorded as the owner of an Own Account Enterprise (An own account enterprise is an undertaking run by household labor, usually without any hired worker employed on a "fairly regular basis"), or as an employer in a Household enterprise.

From the summary statistics described in Table 1 we note that about 15% of our sample reports being a household firm employer (about 189,000 individuals). *Household enterprise worker* is an individual who is an employee in a household enterprise. About 139,000 workers are household employees, or 11% of the sample. *Formal employee* is a worker employed in a formal sector firm. *Formal casual employee* refers to part-time workers in the formal sector. The distribution of activities shows that around one quarter of workers are in household enterprises, either as the sole worker or as employees, and only 8 percent of workers represent having a formal sector job.

We identify those who are not working but looking for work as *Unemployed,* and those who are currently attending educational institutions, defined as *Student*. Unemployment is low, at 2.4 percent, but then lacking employment, the poor often work either in household production (26% of the sample) or as casual workers (10% of the sample). More than one quarter of the sample report they are attending educational institutions rather than working.

We restrict our sample to individuals between age 10 and 70 (the lower bound of 10 allows for child labor if prevalent). The average age of workers is 27, and with an almost even split between men and women. Education ranges from illiteracy for 31 percent of the population, some degree of primary for 28 percent of the population, to middle school or more advanced degree for 41 percent of the population.

The surveys also record *Wages*, which are defined as weekly wages or salary, which we normalize to an annualize wage. For round 51, we deflate nominal values to 1999 values using the consumer price index. The survey codes education as a categorical variable, including from illiterate, literate without formal school, and various degrees of

formal schooling up to post-secondary degree. In terms of geographical location, workers are identified by district and by urban or rural. Annual wages are INR 30,837, or approximately USD 685 at 1999 exchange rates. This is somewhat below 2 dollars a day on average.

### 2.2 Service Sector Surveys

We also use data from two nationally representative repeated cross-sections of service sector firms: round 57 (2001-02) and round 63 (2006-2007) conducted by the NSS Organization. The surveys cover a broad range of service activities including hotels and restaurants; transport, storage, and communications; real estate, renting, and business activities; education; health and social work; and other community, social, and personal activities. The 63rd round includes financial intermediation as well, but since these services are not included in the 57th round, we exclude them from our analysis. Also excluded from both rounds of surveys are: the wholesale and retail sector; public administration and defense; production activities of private households; and extraterritorial organizations. Furthermore, no public sector enterprises are covered by the two surveys.

Table 2 presents summary statistics for our key variables. There are over 440,000 firms surveyed over the two rounds. The average service sector firm has 1.8 employees, with a single owner-proprietor being the modal size. Gross value added at the firm level is defined as total receipts less total operating expenses. Annual gross value added is approximately INR 74,000 or approximately USD 1600, consistent with the fact that the average service firm is small. At the same time, both variables also are highly skewed with the largest firm employing over 75,000 workers and an annual gross value added of over

USD 1 billion. The survey also reports that 11.6 percent of firms currently have an outstanding loan. The average loan size is approximately Rs. 700,000 or USD 15,000. Wages are defined as total salary, wages, allowances, and other individual benefits (cash & kind including bonus, retirement benefits etc. apportioned for the month), in addition to the imputed value of group benefits for the month (including employer's contribution towards canteen, sports, insurance, etc.). We scale wages to an annual reference. We deflate round 63 to 1999 values.

### 2.3 Banking Data

In India, banks are required to obtain a license from the central bank, the Reserve Bank of India (RBI), before opening a new branch. In 1977, the RBI introduced a new licensing policy to target unbanked rural locations. According to this act, a bank could only obtain a license to open a branch in an already banked location if it also opened branches in four unbanked locations (Burgess and Pande, 2005), what is commonly referred to as the 1:4 licensing policy. The goal of this policy was to open bank branches in the most populated regions that were not serviced by banks. As noted by Burgess and Pande (2005), between 1969 and 1990, bank branches were opened in about 30,000 rural unbanked locations, and bank borrowing as a share of total rural household debt increased from 0.3 percent to 29 percent. This policy was discontinued in 1990, and the new policy stated that bank branch location would be based on the "need, business potential, and financial viability of the location" (Government of India, 1991).

We use data on government bank branches in 1991, the year prior to the economic reforms, when bank branch location was still governed by the 1:4 rule, when location was mainly determined by population and existing access of a region to formal financial

institutions. We merge the district identifier from the four NSS surveys with the identifiers from our banking data. From 588 total districts in our banking data, we are able to merge 364 districts into the services data and 465 districts into the employment-unemployment surveys. The number of districts is different when matching the unemployment-employment surveys and service firm surveys because of changes in the names (as listed in the data) or geographic extent of districts. Table 3 describes the banking data. On average, based on the employment-unemployment survey, there are about 34 government-owned bank branches per district (26 in service sector firm survey).

## 3. Results from Employment-Unemployment Survey

We start by examining the probability of being an employer in a Household enterprise using data from the Employment unemployment survey described in the previous section. Specifically, we estimate the following logit specification with state fixed effects using individual level data:

$$\Pr(Household\ Enterprise\ Employer_{it}) = \beta_1 Log\left(Government\ Bank\ Branches_{1991,d}\right) + \beta_2 Age_{it} + \beta_3 Male_{it} + \beta_4 Population_{dt} + \alpha_{Industry} + \alpha_{State},$$

where *i* refers to individual, *t* refers to the round of the survey (1999 or 2004), and *d* refers to district. The dependent variable is equal to one if the individual is either self-employed in an Own Account Enterprise (OAE), which has no employees, or is the boss of a household enterprise with at least one employee. The specification controls for individual characteristics including age and gender, district and regional characteristics, including

population at the district level and state fixed effects. We consider sub-samples based on industry category, hence we do not include industry fixed effects.

To address potential endogeneity in the financial development variable, we use the number of government-owned bank branches in a district in 1991. In 1991, government bank branch location was based primarily on population and the prior existence of formal lending institutions, rather than profit-seeking location choices. Furthermore, 1991 is sufficiently prior to the period that we examine that it is unlikely that the post-reform, service-driven growth of the early 2000s could have been anticipated by banks in their location choice. We also use credit provided by government-owned banks in 1991 at the district level as an alternative measure of access to finance. Our main assumption is that 1991 government bank branch location is correlated with bank location in 1999 and 2004, but is not selected to anticipate the growth opportunities of the economy in the 2000s (after controlling for state fixed effects). We also estimate this specification for different subsamples, based on sector and individual characteristics, to capture how financial development affects occupational choice based on these characteristics.

In order to empirically investigate the plausibility of our identify assumption, we turn to the 1987 NSS Employment-Unemployment Survey to construct a district-level series of wages and employment spanning 1987 to 2004. We then examine the correlation between district-level wage and employment growth from 1987 to 1999 and from 1999 to 2004. The results are presented in Figures 1 and 2. Figure 1 shows that wage growth from 1987 to 1999 is not a statistically significant predictor of wage growth between 1999 and 2004. In contrast, in Figure 2, we find a negative correlation between employment growth in these two periods. The results suggest that, if anything, growth opportunities prior to

1999 are negatively correlated with growth opportunities in the period we examine. As such, if the number of government-owned bank branches is endogenously based on profit-seeking location choice (which we believe is unlikely in 1991 given the institutional context), then it is likely to be negatively selected, with additional branches located in districts which had poor growth opportunities in the period we study. This would bias our results away from finding a positive impact of financial development on wages and occupation choice between 1999 and 2004.

The results are reported in Table 4, Panels A and B. Panel A, column (1) reports the results from estimating specification (1) for the entire sample, columns (2) and (3) consider household enterprise is in the manufacturing and service sector respectively, columns (4)-(6) considers different subsamples based on the education level of the household enterprise employer, and columns (7) and (8) considers two subsamples based on whether the enterprise employs less than 6 workers or more. The remaining tables adopt a similar structure.

The results reported in column (1) suggest that an increase in the number of bank branches in a district is associated with a significant decrease in the probability of being an employer in a household enterprise. From column (1) we note that the mean number of government-owned bank branches in a district is associated with a 2% decrease in the probability of being a household employer in that district, relative to the underlying mean of an 18% probability of being an employer in a household enterprise. While we do not find any distinction between enterprises in manufacturing relative to services, the results appear to vary based on the educational level of the individual. In particular, while improved access to finance does not appear to be significantly correlated with the

occupational choices of illiterate employers, the probability of self-employment for more educated individuals is significantly negatively correlated with access to finance. For example, the mean number of government-owned bank branches in a district is associated with nearly a 4% decrease in the probability of being a household employer for individuals with middle school or higher education in that district, compared to no significant difference for illiterate individuals.

We also find that the likelihood of being the employer of a larger enterprise employing 6 or more workers is significantly lower in districts with more bank branches. The mean number of government-owned bank branches in a district is associated with a 3.2% decrease in the probability of being a household employer of a firm with 6 or more workers in that district, compared to no significant change for smaller firms.

We observe similar effects in Panel B using an alternative measure of financial development, credit provided by government-owned banks at the district level in 1991. The main difference is that the decline in self-employment in household enterprises is significantly greater in manufacturing firms located in districts where government banks provide more credit.

Increased access to finance is associated with a shift in the occupational choice of individuals. One explanation for the negative correlation between entrepreneurship and access to finance may lie in the nature of the household firm. In many developing countries such as India, household enterprises offer subsistence employment in the absence of other formal employment opportunities.

We next examine the relationship between financial development and employment in household enterprises with the following logit specification, using individual level data from the employment unemployment survey:

$$\Pr(Household\ Enterprise\ Worker_{it}) = \beta_1 Log\left(Government\ Bank\ Branches_{1991,d}\right) + \beta_2 Age_{it} + \beta_3 Male_{it} + \beta_4 Population_{dt} + \alpha_{Industry} + \alpha_{State},$$

where an individual is characterized as being a Household Enterprise Worker if s/he is employed in a household enterprise, and/or, is not working at the time of the survey, is sick. The results reported in Table 5, Panel A, suggest that the likelihood of being employed as a household firm worker is significantly negatively associated with financial development. For example, the mean number of government-owned bank branches in a district is associated with a decrease of about 7.4% in the likelihood of being employed in a household firm in that district, relative to the underlying mean of 12.4%.

An increase in the number of government bank branches is associated with a significant decline in the likelihood of working as a HH enterprise worker in both manufacturing and service sector firms. Similarly, individuals are less likely to be employed as a worker in the informal household sector irrespective of education status or the size of the HH enterprise. The results are similar when we use credit provided by government owned banks in a district (Panel B). Thus, it appears that financial development in a district is associated with a shift in the occupational choice of workers as well as employers away from micro household enterprises in the informal sector.

To further investigate this result, we examine employment in the formal sector. The dependent variable is a categorical variable that is equal to one if the individual is

employed in the formal sector, or is not working at the moment. The results are reported in Table 6. From Panel A, column (1) we note that for the full sample of individuals, the likelihood of being employed in the formal sector is significantly higher for individuals in districts with more bank branches. The mean number of government-owned bank branches in a district is associated with an increase of about 2.6% in the likelihood of being a formal sector firm employee in that district, relative to the underlying mean of 9.6%.

Considering sub-samples of the data based on industry, individual, and firm characteristics, we find that this effect is stronger for firms in manufacturing. The results also suggest that the likelihood of being employed in the formal sector is higher for workers with all levels of education in districts with more government bank branches, although the odds are highest for more educated workers. Lastly, from columns (7) and (8) we note that the likelihood of being a formal sector employee appears to be higher for individuals working in larger firms. The results are similar in Panel B, where we use government bank credit in a district.

While the previous results considered full time workers, we also observe casual or part-time workers in the formal sector, and find similar, albeit less statistically significant effects. Casual or part-time employment in the formal sector is significantly higher for service sector firms in districts with more bank branches, and in smaller firms that employ fewer than 6 workers. We do not observe a significant change in part-time employment in the formal sector for the full sample. These results are reported in Table 7.

So far the results indicate that financial development is associated with a shift in occupational choice from micro-entrepreneurship and employment in micro-enterprises to regular employment in the formal sector. Next, we examine the relationship between

wages and financial development. Specifically, if access to finance has allowed firms in the organized sector to increase their employment, thereby reducing employment in household enterprises that do not pay regular salaries, we may observe a similar pattern for wages.

We estimate the following linear specification, using wage data from the employment unemployment survey:

$$\text{Log}\,(Wages_{it}) = \beta_1 Log\big(Government\ Bank\ Branches_{1991,d}\big) + \beta_2\, Age_{\ it} + \beta_3\, Male_{\ it} + \beta_4\, Population_{dt} + \varepsilon_{idt}$$

The results reported in Table 8, Panel A, suggest that on average, in districts with more bank branches, wages are higher for the full sample of individuals. Specifically, the mean number of government-owned bank branches in a district is associated with an increase in wages of about 4.3% on average for households in that district. Considering sub-samples of the data based on industry characteristics, we find that wages increase for both manufacturing and service sector firms, although manufacturing firms appear to have slightly higher wages on average. Individual characteristics also matter, since more educated workers appear to be paid more on average in districts with more government bank branches. Wages are higher in small and larger firms, although the latter appear to experience a slightly higher increase in wages in districts with more bank branches. The last 4 columns examine the results for household enterprises and formal sector firms. Since most household enterprises do not pay regular wages, the sample size for reported wages is very small. For those household firms reporting wages, there appears to be a slight increase in wages paid to workers of these enterprises, but not for entrepreneurs. In

contrast, the last two columns show that in districts with more bank penetration, wages are higher for formal sector full-time and part-time employees. The results in Panel B, using government bank credit rather than branches, are similar.

Lastly, we examine the probability of being unemployed and/or being a student enrolled in an educational institution, based on access to finance in that district. The results reported in Table 9 suggest that the likelihood of being unemployed is not significantly different in districts with more bank branches, however, the likelihood of being a student increases significantly in more financially developed districts. For example, the mean number of government-owned bank branches in a district is associated with an increase in the probability of being a student by 12% in that district, relative to an underlying mean of 18%. The latter result suggests that access to finance may increase investment in human capital because of either an increase in disposable income for households, or more job opportunities for educated workers.

The wage results corroborate the occupational choice results. In districts with greater access to credit, captured by government-owned bank branches and credit, there is a shift in individuals' employment away from micro-entrepreneurship in household firms that do not pay regular wages, to full time employment in the organized sector. The intuitive interpretation of these results is that in more financially developed districts, formal sector firms are able to expand employment and pay higher wages, thereby moving workers out of subsistence employment in household firms into regular salaried jobs.

Considering different sub-samples also provide insight into individual and firm characteristics that appear to benefit from increased access to finance. In particular, more educated workers, who may be more attractive to firms or may be better informed about

employment opportunities, appear to benefit more from improved access to finance. Workers earn higher wages on average, and are more likely to be employed in larger firms that hire six or more workers, in districts that have greater access to credit. While it may still be the case that bank branch location is endogenous to district-level characteristics that also affect the occupational choice and wages of individuals, the 8 year gap between the year of the banking data and the year of our sample reduces the possibility of reverse causality driving the results.

## 4. Results from Service Sector Survey

The NSS survey of service sector firms allows us to examine the relationship between access to finance and firm-level productivity, employment, and wages. As described in the data section, the data is from two rounds of surveys conducted in 2001 and 2006, and, cover 440,000 firms operating in a broad range of service activities. Since the service sector is one of the fastest growing sectors in India, it offers a unique opportunity to examine the role of financial development in facilitating growth. Another advantage of focusing on service sector firms is that the rapid growth in this sector was unanticipated prior to the economic reforms, reducing the potential for endogenous location of bank branches to the future characteristics of service sector firms in that region. We start by examining the relationship between firm-level loans and financial development in that district, and report the results in Table 10. We estimate the following linear specification using firm-level data, and controlling for 2 digit industry and state-fixed effects:

$$Log(Firm\ characteristic)_{i,d,t} = \beta_1 Log\left(Government\ Bank\ Branches_{1991,d}\right) +$$

$$\beta_2 Labor\_Post + \beta_3 District\ Population + \varepsilon_{idt},$$

where *Firm characteristic* includes firm-level loans, employment, productivity, and, wages, *Labor_Post* is the interaction between labor regulations at the state-level and a time dummy. The labor regulations measure is from Besley and Burgess (2002), and captures state specific text amendments to the Industrial Disputes Act of 1947, which may be pro-employer, anti-employer, or may not affect the bargaining power of either workers or employers. The remaining variables are as defined earlier.

From Table 10 Panel A, we observe that in the full sample, on average, firms located in more financially developed districts borrow more. For instance, the mean number of government-owned bank branches in a district is associated with a 0.2% increase in loans for firms located in that district, on average. Considering sub-samples of the data based on firm characteristics, we observe that larger firms that employ more workers, and firms located in urban areas have higher loans on average in districts that have more government bank branches. Panel B reports result using government bank credit as an alternative measure of financial development, and the results are similar. It appears that access to credit is associated with an increase in loans.

Examining whether the employment decisions of service sector firms vary based on access to finance in Table 11, we observe that firms located in districts with greater access to finance hire more workers on average, for the full sample of firms. For instance, the mean number of government-owned bank branches in a district is associated with a 0.45% increase in employment on average in service sector firms located in that district.

Considering sub-samples next, the results suggest that larger firms and firms located in urban areas, increase employment more in more financially developed districts.

In Table 12, we examine productivity (Value added per worker), and find a similar pattern. On average, productivity is higher for firms located in more financially developed districts. The increase in productivity is concentrated in larger firms, and firms located in urban areas. The results are similar when we use government bank credit at the district level.

Lastly, in Table 13, we consider wages in service sector firms, and show that on average, service sector firms pay higher wages in districts that are more financially developed. For example, the mean number of government-owned bank branches in a district is associated with a 0.2% increase in the average wages of service sector firms in that district. These effects appear to be concentrated in larger firms and those located in urban areas, which may reflect the growth opportunities and credit worthiness of these firms.

The service sector firm-level data provide an in-depth view of the role of finance in firm employment decisions. Firms borrow more in more financially developed districts, suggesting that financial development eases financial constraints. The results indicate that larger firms, and those located in urban areas are less financially constrained, which may be because they are more credit worthy, have access to better information, or face better growth opportunities. Reduced financial constraints due to greater access to finance in turn appear to be associated with an increase in employment, wages, and worker productivity.

## 5. Conclusion

Using survey data on over one million households, we show that access to finance may impact the occupational choices of individuals. In a departure from the extant literature on the topic, we observe that greater access to credit through formal lending channels is associated with a decrease in self-employment and wage employment in micro-enterprises in the informal sector. Instead, an expansion in bank branches and credit from government-owned banks is associated with an increase in employment in formal sector firms.

Increasing access to finance through banking sector deregulation and formal lending channels may have a positive impact on firms in the formal sector, that have access to credit through these channels. For example, using data on service sector firms, which experienced significant growth during this period, we observe that firms located in districts with greater access to credit have higher loans, wages, productivity, and employment.

While much of the recent literature on this topic has focused on the benefits of micro-lending to household firms, in many developing countries, micro-enterprises may provide shadow employment to workers without access to formal sector jobs. Indeed in our data, only a tiny fraction of households report receiving regular pay in household firms. Our results suggest that greater access to finance through formal credit channels is associated with a decrease in household employment, increase in formal sector employment, higher wages, and increased likelihood of being enrolled in an educational institution.

These results have a clear policy implication. In many developing countries formal sector firms may also be credit constrained, and may be positively affected by improved access to credit through traditional lending channels. These firms may be able to provide

wage employment to workers employed in micro-enterprises in the informal sector that are not productive. Our results suggest that increasing access to finance through traditional channels may allow workers to obtain paid employment in more productive firms.

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**Figure 1: Correlation Between Wage Growth in 1987-1999 and 1999-2004**

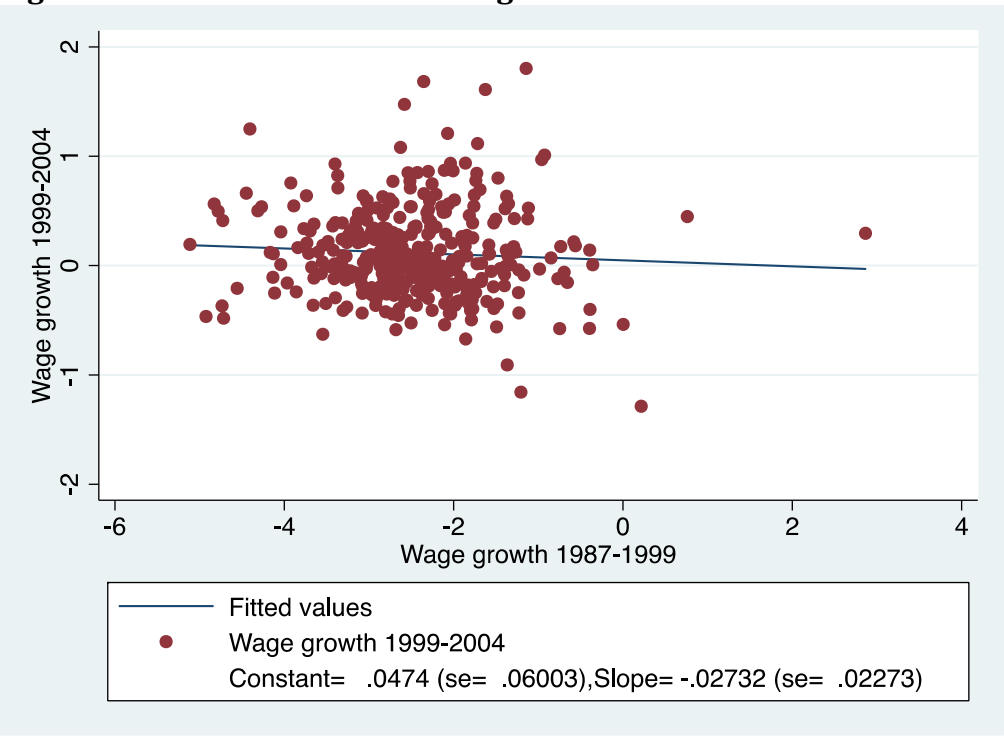


**Figure 2: Correlation between Employment Growth in 1987-1999 and 1999-2004**

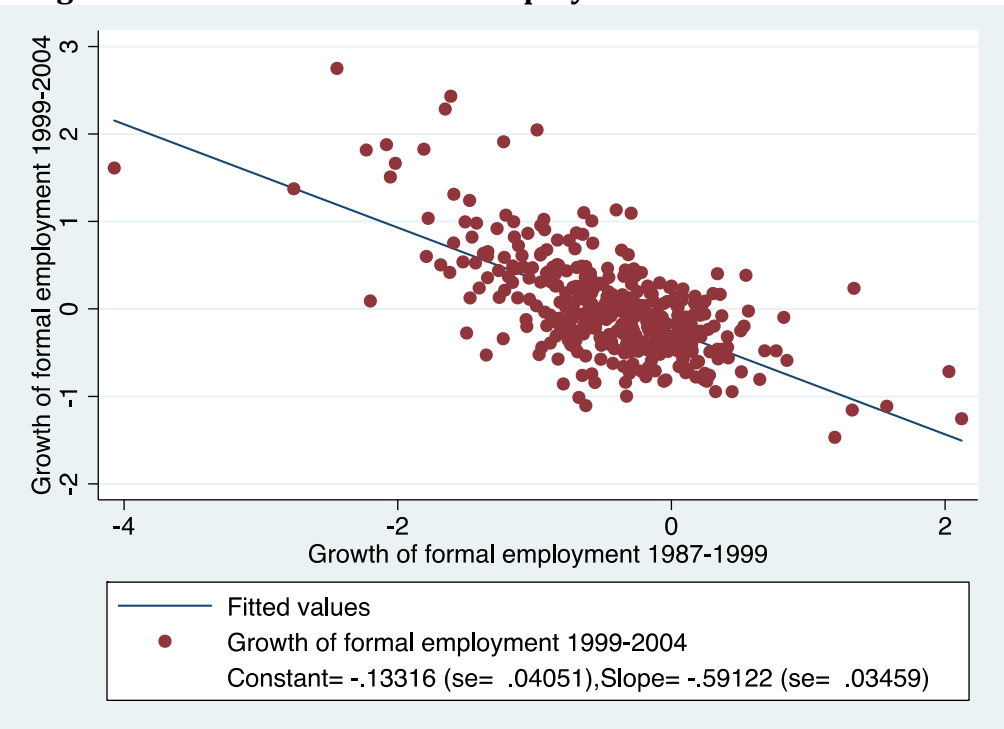

**Table 1: Summary Statistics from NSS Rounds 55 and 61 of the Employment-Unemployment Survey**

Using data from Rounds 55 and 61 of the NSS Employment Survey, we present summary statistics of our sample.

| | Mean | Min | Max | Standard Dev | Observations |
|---|---|---|---|---|---|
| Log annual wages | 9.86 | 5.05 | 16.60 | 1.07 | 194,349 |
| Works in household enterprise as sole employee or employer | 0.16 | 0 | 1 | 0.36 | 1,260,113 |
| Employer in household enterprise | 0.15 | 0 | 1 | 0.36 | 1,260,113 |
| Works in household enterprise as employee | 0.11 | 0 | 1 | 0.31 | 1,260,113 |
| Formal sector employee | 0.08 | 0 | 1 | 0.28 | 1,260,113 |
| Formal sector part-time employee | 0.10 | 0 | 1 | 0.30 | 1,260,113 |
| Unemployed | 0.02 | 0 | 1 | 0.15 | 1,260,113 |
| Engaged in household production | 0.26 | 0 | 1 | 0.44 | 1,260,113 |
| Student | 0.25 | 0 | 1 | 0.43 | 1,260,113 |
| Age (in decades) | 2.75 | 0 | 11.5 | 1.86 | 1,383,432 |
| Male | 1.48 | 1 | 2 | 0.50 | 1,383,941 |
| Illiterate | 0.31 | 0 | 1 | 0.46 | 1,606,913 |
| Literate: primary or less | 0.28 | 0 | 1 | 0.45 | 1,606,913 |
| Educated: middle school + | 0.41 | 0 | 1 | 0.49 | 1,606,913 |

**Table 2: Summary Statistics from NSS Rounds 57 and 63 of the Service Firm Surveys**

Using data from Rounds 57 and 63 of the NSS Service Firm Surveys, we present summary statistics of our sample.

| | Mean | Min | Max | Standard Dev | Observations |
|---|---|---|---|---|---|
| Annual GVA | 74424.3 | -30128382 | 59008385024 | 24117383.6 | 446,426 |
| Log annual GVA | 10.02 | 2.998 | 24.8 | 1.117 | 442,659 |
| Total workers | 1.836 | 1 | 75052 | 27.16 | 446,877 |
| Annual wages per worker | 8094.6 | 7.355 | 9244473 | 22420.8 | 142,926 |
| Log annual wages per worker | 8.092 | 1.995 | 16.04 | 1.554 | 142,926 |
| ln GVA per worker | 9.677 | 1.378 | 18.47 | 0.977 | 442,659 |
| Have an outstanding loan | 0.116 | 0 | 1 | 0.32 | 446,883 |
| Value of outstanding loans | 701019 | 0 | 2.5037E+11 | 210364749 | 55,684 |
| Log value of outstanding loans >0 | 9.171 | 1.619 | 26.25 | 2.505 | 55,676 |
| Loan amount relative to state mean | 0.237 | 0 | 4923.8 | 7.986 | 55,684 |
| Loan amount in hundred thousand US | 0.14 | 0 | 50074.1 | 42.07 | 55,684 |

**Table 3: Summary Statistics of Banking Data**

We merge banking data by district to the NSS Employment-Unemployment Surveys and Service Firm Surveys.

Panel A: Districts merged to Employment-Unemployment Survey

| | Mean | Min | Max | Standard Dev | Observations |
|---|---|---|---|---|---|
| Total government branches by district 1991 | 34.19 | 0 | 268.00 | 34.66 | 461 |
| Log gov't branches by district 1991 | 3.19 | 0 | 5.60 | 0.92 | 461 |
| Total government bank credit by district 1991 | 178.20 | 0 | 6048.20 | 660.40 | 461 |
| Log total government bank credit by district 1991 | 3.77 | 0 | 8.71 | 1.47 | 461 |
| Total branches by district 1991 | 169.80 | 3 | 1177.00 | 159.50 | 461 |
| Log branches by district 1991 | 4.77 | 1.10 | 7.07 | 0.98 | 461 |
| Total bank credit by district 1991 | 567.20 | 0.06 | 26168.50 | 2285.50 | 461 |
| Log total bank credit by district1991 | 4.83 | -2.81 | 10.17 | 1.63 | 461 |

Panel B: Districts merged to Service Firm Surveys

| | Mean | Min | Max | Standard Dev | Observations |
|---|---|---|---|---|---|
| Total branches by district 1991 | 140.1 | 9 | 1177 | 90.65 | 364 |
| Log branches by district 1991 | 4.794 | 2.197 | 7.071 | 0.528 | 364 |
| Total bank credit by district 1991 | 254.1 | 1.94 | 26168.5 | 841.7 | 364 |
| Log total bank credit by district1991 | 4.723 | 0.663 | 10.17 | 1.022 | 364 |
| Total government branches by district 1991 | 26.42 | 3 | 175 | 21.8 | 364 |
| Log gov't branches by district 1991 | 3.081 | 1.386 | 5.17 | 0.662 | 364 |
| Total government bank credit by district 1991 | 83.62 | 1.11 | 5218 | 238.8 | 364 |
| Log total government bank credit by district 1991 | 3.623 | 0.747 | 8.56 | 1.074 | 364 |

**Table 4: Access to Credit and Likelihood of being a Household Firm Employer**

Using data from the Employment-Unemployment Survey, this table provides results from a logit specification where the dependent variable is equal to one if the individual is either self-employed in an Own Account Enterprise (OAE), which has no employees, or is the boss of a household enterprise with at least one employee. In Panel A, *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991; *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit)* which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employer education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| Log (*Government Bank Branches in 1991 +1)* | -0.0065* | -0.0288 | -0.0024 | -0.0013 | -0.0106** | -0.0115*** | -0.0011 | -0.0097** |
| | (0.004) | (0.022) | (0.010) | (0.006) | (0.004) | (0.004) | (0.012) | (0.004) |
| *Age (in decades)* | 0.0537*** | 0.0792*** | 0.0553*** | 0.0353*** | 0.0616*** | 0.0631*** | 0.1123*** | 0.0391*** |
| | (0.001) | (0.006) | (0.003) | (0.001) | (0.002) | (0.002) | (0.004) | (0.001) |
| *Male* | 0.1896*** | 0.1384*** | 0.1930*** | 0.2413*** | 0.1326*** | 0.1711*** | 0.1517*** | 0.1459*** |
| | (0.004) | (0.020) | (0.009) | (0.006) | (0.004) | (0.004) | (0.018) | (0.004) |
| *District population (millions)* | -0.0032* | -0.0215** | -0.0029 | 0.0008 | -0.0040 | -0.0061*** | 0.0011 | -0.0072*** |
| | (0.002) | (0.009) | (0.004) | (0.003) | (0.002) | (0.002) | (0.005) | (0.002) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 4 Panel B**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employer education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| *Log (Government Bank Credit in 1991 +1)* | -0.0081*** | -0.0289** | -0.0047 | -0.0068 | -0.0113*** | -0.0095*** | -0.0023 | -0.0126*** |
| | (0.002) | (0.013) | (0.006) | (0.005) | (0.003) | (0.002) | (0.008) | (0.003) |
| *Age (in decades)* | 0.0537*** | 0.0796*** | 0.0554*** | 0.0353*** | 0.0617*** | 0.0632*** | 0.1123*** | 0.0391*** |
| | (0.001) | (0.006) | (0.003) | (0.001) | (0.002) | (0.002) | (0.004) | (0.001) |
| *Male* | 0.1894*** | 0.1390*** | 0.1929*** | 0.2413*** | 0.1321*** | 0.1709*** | 0.1518*** | 0.1451*** |
| | (0.004) | (0.020) | (0.009) | (0.006) | (0.004) | (0.004) | (0.018) | (0.004) |
| *District population (millions)* | -0.001 | -0.0145 | -0.0014 | 0.0037 | -0.0014 | -0.0042** | 0.0019 | -0.0035 |
| | (0.002) | (0.009) | (0.005) | (0.004) | (0.003) | (0.002) | (0.006) | (0.003) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 5: Access to Credit and Likelihood of being a Household Firm Worker**

Using data from the Employment-Unemployment Survey, this table provides results from a logit specification where the dependent variable is equal to one if the individual is an employee in a household firm. In Panel A, *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991; *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit)* which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| Log (*Government Bank Branches in 1991 +1)* | -0.0179*** | -0.0194** | -0.0171*** | -0.0115 | -0.0157*** | -0.0253*** | -0.0237*** | -0.0171*** |
| | (0.006) | (0.010) | (0.004) | (0.008) | (0.005) | (0.005) | (0.007) | (0.006) |
| *Age (in decades)* | -0.0090*** | -0.0303*** | -0.0372*** | -0.0160*** | 0.0051*** | -0.0214*** | -0.0486*** | -0.0060*** |
| | (0.001) | (0.004) | (0.002) | (0.001) | (0.001) | (0.001) | (0.003) | (0.001) |
| *Male* | -0.0304*** | -0.2813*** | -0.0941*** | -0.0965*** | -0.0178*** | 0.0436*** | -0.2062*** | -0.0227*** |
| | (0.004) | (0.026) | (0.010) | (0.006) | (0.004) | (0.004) | (0.013) | (0.004) |
| *District population (millions)* | -0.0137*** | -0.0131** | -0.0021 | -0.0133*** | -0.0100*** | -0.0136*** | -0.0015 | -0.0169*** |
| | (0.003) | (0.005) | (0.002) | (0.005) | (0.003) | (0.003) | (0.003) | (0.004) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 5 Panel B**

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| *Log (Government Bank Credit in 1991 +1)* | -0.0196*** | -0.0249*** | -0.0072*** | -0.0220*** | -0.0148*** | -0.0190*** | -0.0148*** | -0.0205*** |
| | (0.003) | (0.006) | (0.002) | (0.006) | (0.003) | (0.003) | (0.003) | (0.004) |
| *Age (in decades)* | -0.0088*** | -0.0296*** | -0.0373*** | -0.0158*** | 0.0052*** | -0.0211*** | -0.0485*** | -0.0058*** |
| | (0.001) | (0.004) | (0.002) | (0.001) | (0.001) | (0.001) | (0.003) | (0.001) |
| *Male* | -0.0305*** | -0.2779*** | -0.0938*** | -0.0963*** | -0.0181*** | 0.0432*** | -0.2051*** | -0.0231*** |
| | (0.004) | (0.026) | (0.010) | (0.006) | (0.004) | (0.004) | (0.013) | (0.004) |
| *District population (millions)* | -0.0084** | -0.0054 | -0.0024 | -0.0050 | -0.0068** | -0.0102*** | 0.0001 | -0.0109*** |
| | (0.004) | (0.006) | (0.002) | (0.005) | (0.003) | (0.003) | (0.003) | (0.004) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 6: Access to Credit and Likelihood of being a Formal Sector Firm Employee**

Using data from the Employment-Unemployment Survey, this table provides results from a logit specification where the dependent variable is equal to one if the individual is an employee in a formal sector firm. In Panel A, *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991; *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit)* which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | | Sector | | | Employee education | | | Firm size |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| Log (*Government Bank Branches in 1991 +1)* | 0.0083** | 0.0794* | 0.0087 | 0.0091** | 0.0088* | 0.0203*** | -0.0055 | 0.0073*** |
| | (0.003) | (0.041) | (0.015) | (0.004) | (0.005) | (0.008) | (0.013) | (0.003) |
| *Age (in decades)* | 0.0115*** | 0.0044 | 0.0335*** | -0.0013*** | 0.0091*** | 0.0566*** | -0.0093** | 0.0093*** |
| | (0.001) | (0.010) | (0.005) | 0.000 | (0.001) | (0.002) | (0.004) | (0.001) |
| *Male* | 0.0550*** | 0.1627*** | -0.1315*** | 0.0248*** | 0.0442*** | 0.1327*** | -0.0355*** | 0.0448*** |
| | (0.004) | (0.022) | (0.013) | (0.002) | (0.003) | (0.006) | (0.010) | (0.004) |
| *District population (millions)* | 0.0073*** | 0.0390* | 0.0167** | 0.0026 | 0.0079*** | 0.0210*** | 0.0144* | 0.0050*** |
| | (0.002) | (0.023) | (0.008) | (0.002) | (0.003) | (0.004) | (0.008) | (0.002) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

Panel B

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | | Sector | | | Employee education | | | Firm size |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| *Log (Government Bank Credit in 1991 +1)* | 0.0073*** | 0.0660*** | 0.0092 | 0.0072*** | 0.0088*** | 0.0175*** | 0.0028 | 0.0059*** |
| | (0.002) | (0.020) | (0.008) | (0.002) | (0.002) | (0.004) | (0.008) | (0.001) |
| *Age (in decades)* | 0.0114*** | 0.0033 | 0.0335*** | -0.0014*** | 0.0089*** | 0.0563*** | -0.0094** | 0.0092*** |
| | (0.001) | (0.010) | (0.005) | 0.000 | (0.001) | (0.002) | (0.004) | (0.001) |
| *Male* | 0.0551*** | 0.1634*** | -0.1313*** | 0.0247*** | 0.0440*** | 0.1330*** | -0.0354*** | 0.0450*** |
| | (0.004) | (0.023) | (0.013) | (0.002) | (0.003) | (0.006) | (0.010) | (0.003) |
| *District population (millions)* | 0.0057** | 0.0255 | 0.0144* | 0.0012 | 0.0057** | 0.0172*** | 0.012 | 0.0038*** |
| | -0.002 | -0.022 | -0.008 | -0.002 | -0.003 | -0.004 | -0.008 | -0.001 |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 7: Access to credit and likelihood of being a formal sector firm part-time employee**

Using data from the Employment-Unemployment Survey, this table provides results from a logit specification where the dependent variable is equal to one if the individual is an employee in a formal sector firm. In Panel A, *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991; *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit)* which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| Log (*Government Bank Branches in 1991 +1)* | 0.0078 | 0.0169 | 0.0137*** | 0.0105 | 0.0074 | 0.0019 | 0.0353*** | 0.0039 |
| | (0.008) | (0.021) | (0.005) | (0.013) | (0.010) | (0.005) | (0.009) | (0.008) |
| *Age (in decades)* | -0.0039*** | -0.0449*** | -0.0223*** | -0.0239*** | 0.0184*** | -0.0087*** | -0.0407*** | -0.0007 |
| | (0.001) | (0.006) | (0.002) | (0.002) | (0.001) | (0.001) | (0.003) | (0.001) |
| *Male* | 0.1330*** | 0.0453*** | 0.0113** | 0.2045*** | 0.1252*** | 0.0837*** | 0.0811*** | 0.1364*** |
| | (0.005) | (0.013) | (0.004) | (0.009) | (0.006) | (0.004) | (0.007) | (0.006) |
| *District population (millions)* | -0.0115* | -0.0104 | -0.0068** | -0.0149* | -0.0098 | -0.0099*** | -0.0145** | -0.0100* |
| | (0.006) | (0.011) | (0.003) | (0.008) | (0.007) | (0.004) | (0.006) | (0.006) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

Panel B

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers |
| *Log (Government Bank Credit in 1991 +1)* | 0.0022 | 0.0087 | 0.0042* | 0.0037 | 0.0028 | -0.0022 | 0.0159*** | 0.0005 |
| | (0.005) | (0.012) | (0.002) | (0.009) | (0.006) | (0.003) | (0.005) | (0.006) |
| *Age (in decades)* | -0.0039*** | -0.0449*** | -0.0223*** | -0.0239*** | 0.0184*** | -0.0086*** | -0.0407*** | -0.0007 |
| | (0.001) | (0.006) | (0.002) | (0.002) | (0.001) | (0.001) | (0.003) | (0.001) |
| *Male* | 0.1330*** | 0.0452*** | 0.0111** | 0.2046*** | 0.1252*** | 0.0836*** | 0.0808*** | 0.1363*** |
| | -0.005 | -0.013 | -0.004 | -0.009 | -0.006 | -0.004 | -0.007 | -0.006 |
| *District population (millions)* | -0.0109* | -0.0108 | -0.0059** | -0.0142* | -0.0095 | -0.0085** | -0.0142** | -0.0094 |
| | (0.006) | (0.012) | (0.003) | (0.008) | (0.007) | (0.004) | (0.007) | (0.006) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 20,716 | 148,639 | 307,253 | 288,322 | 350,806 | 75,582 | 870,799 |

**Table 8: Wages and access to credit**

Using data from the Employment-Unemployment Survey, this table provides results from an OLS specification where the dependent variable is the log of Wages, or annual compensation. In Panel A, *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991; *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit)* which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | | HH enterprise | | Formal sector | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Literate with less than primary | Middle school and above | Employs <= 6 workers | Employs > 6 workers | Employer | Employee | Full time employee | Casual employee |
| Log (*Government Bank Branches in 1991 +1)* | 0.1252*** | 0.1210*** | 0.1057*** | 0.0857*** | 0.1182*** | 0.1608*** | 0.0877*** | 0.1281*** | 0.0600 | 0.1218** | 0.1560*** | 0.0730*** |
| | (0.025) | (0.041) | (0.032) | (0.030) | (0.034) | (0.032) | (0.030) | (0.028) | (0.052) | (0.061) | (0.036) | (0.028) |
| *Age (in decades)* | 0.1320*** | 0.1858*** | 0.2673*** | 0.0188*** | 0.1194*** | 0.3938*** | 0.1704*** | 0.1207*** | 0.0100 | 0.0301* | 0.3021*** | 0.0150*** |
| | (0.006) | (0.017) | (0.008) | (0.005) | (0.008) | (0.011) | (0.008) | (0.007) | (0.019) | (0.016) | (0.009) | (0.004) |
| *Male* | 0.4024*** | 0.3760*** | 0.3886*** | 0.4190*** | 0.4334*** | 0.2047*** | 0.5187*** | 0.3714*** | 0.3052*** | 0.4030*** | 0.3833*** | 0.4545*** |
| | (0.013) | (0.057) | (0.029) | (0.015) | (0.035) | (0.028) | (0.034) | (0.014) | (0.060) | (0.051) | (0.043) | (0.015) |
| *District population (millions)* | 0.0228*** | -0.0116 | 0.0001 | 0.0350** | 0.0413*** | 0.0205** | 0.0005 | 0.0270*** | 0.0599*** | 0.0448 | 0.0002 | 0.0301** |
| | (0.008) | (0.012) | (0.009) | (0.016) | (0.010) | (0.009) | (0.010) | (0.008) | (0.020) | (0.032) | (0.012) | (0.015) |
| Constant | 9.2406*** | 8.5370*** | 8.6759*** | 9.9021*** | 9.5469*** | 9.0282*** | 8.4404*** | 9.2513*** | 9.1966*** | 7.4890*** | 9.0300*** | 9.8574*** |
| | (0.104) | (0.194) | (0.117) | (0.106) | (0.134) | (0.120) | (0.050) | (0.109) | (0.113) | (0.120) | (0.118) | (0.097) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 167,902 | 10,307 | 70,790 | 56,692 | 42,562 | 68,648 | 22,842 | 145,060 | 1,285 | 838 | 85,070 | 80,709 |

Panel B

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sector | | | Employee education | | | Firm size | | HH enterprise | | Formal sector | |
| Variables | All sectors | Manufacturing | Services | Illiterate individual | Literate with less than primary schooling | Middle school and above | Employs <= 6 workers | Employs > 6 workers | Employer | Employee | Full time employee | Casual employee |
| Log (*Government Bank Branches in 1991 +1)* | 0.0812*** | 0.0555** | 0.0532*** | 0.0776*** | 0.0843*** | 0.0916*** | 0.0402** | 0.0899*** | 0.0757*** | 0.0352 | 0.0757*** | 0.0699*** |
| | (0.018) | (0.025) | (0.019) | (0.019) | (0.021) | (0.020) | (0.017) | (0.021) | (0.027) | (0.029) | (0.022) | (0.019) |
| *Age (in decades)* | 0.1313*** | 0.1867*** | 0.2673*** | 0.0181*** | 0.1186*** | 0.3934*** | 0.1707*** | 0.1196*** | 0.0102 | 0.0299* | 0.3024*** | 0.0149*** |
| | (0.006) | (0.017) | (0.008) | (0.005) | (0.008) | (0.011) | (0.008) | (0.007) | (0.019) | (0.017) | (0.009) | (0.004) |
| *Male* | 0.4032*** | 0.3757*** | 0.3892*** | 0.4195*** | 0.4351*** | 0.2068*** | 0.5186*** | 0.3726*** | 0.3121*** | 0.4015*** | 0.3837*** | 0.4535*** |
| | (0.013) | (0.057) | (0.029) | (0.015) | (0.035) | (0.029) | (0.033) | (0.014) | (0.060) | (0.051) | (0.043) | (0.015) |
| *District population (millions)* | 0.0122 | -0.014 | -0.0035 | 0.0187 | 0.0288** | 0.0104 | -0.0003 | 0.0137 | 0.0415** | 0.0592** | -0.0046 | 0.0148 |
| | (0.010) | (0.014) | (0.011) | (0.016) | (0.012) | (0.012) | (0.011) | (0.011) | (0.020) | (0.028) | (0.016) | (0.016) |
| Constant | 9.3242*** | 8.6615*** | 8.7747*** | 9.9183*** | 9.6031*** | 9.1442*** | 8.4399*** | 9.3244*** | 9.2011*** | 7.5886*** | 9.1790*** | 9.8627*** |
| | (0.100) | (0.185) | (0.104) | (0.094) | (0.123) | (0.112) | (0.050) | (0.106) | (0.105) | (0.096) | (0.105) | (0.090) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 167,902 | 10,307 | 70,790 | 56,692 | 42,562 | 68,648 | 22,842 | 145,060 | 1,285 | 838 | 85,070 | 80,709 |

**Table 9: Access to credit and likelihood of being unemployed or being a student**

Using data from the Employment-Unemployment Survey, this table provides results from a logit specification where the dependent variables in columns (1) and (2) is equal to one if the individual is unemployed, and in columns (3) and (4) the dependent variable is equal to one if the individual is enrolled in an educational institution. *Log (Government Bank Branches in 1991)* is the number of government-owned bank branches in a district in 1991;I Log (*Government Bank Credit* ) is the total credit given by government-owned bank branches in that district in 1991. *Age* is the age of the individual in decades; *Male* is the gender; and *District Population* is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | Unemployed | | Student | |
| Log (*Government Bank Branches in 1991 +1)* | 0.0011 | | 0.0070** | |
| | (0.001) | | (0.003) | |
| Log (*Government Bank Credit in 1991 +1)* | | 0.0003 | | 0.0057*** |
| | | 0.000 | | (0.002) |
| *Age (in decades)* | -0.0036*** | -0.0036*** | -0.0996*** | -0.0996*** |
| | 0.000 | 0.000 | (0.002) | (0.002) |
| *Male* | 0.0082*** | 0.0082*** | 0.0026 | 0.0027 |
| | (0.001) | (0.001) | (0.002) | (0.002) |
| *District population (millions)* | -0.0004 | -0.0003 | -0.0009 | -0.0020 |
| | (0.001) | 0.000 | (0.001) | (0.001) |
| Constant | | | 0.4460*** | 0.4488*** |
| | | | -0.016 | -0.016 |
| State FE | Yes | Yes | Yes | Yes |
| Number of observations | 946,381 | 946,381 | 946380 | 946380 |

**Table 10: Access to Credit and Firm loans**

Using data from the Service Sector survey, this table provides results from a OLS specification where the dependent variable is the log of *Loans* at the firm level. In Panel A, Log (*Government Bank Branches in 1991* ) is the number of government-owned bank branches in a district in 1991; *Labor_Post* is the interaction between Labor regulations at the state level and a year dummy. District Population is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit* ) which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm size | | Location | |
| | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Variable | | | | | |
| Log (*Government Bank Branches in 1991 +1)* | 0.260* | 0.132 | 0.443*** | 0.094 | 0.324* |
| | (0.139) | (0.117) | (0.159) | (0.163) | (0.175) |
| *Labor_Post* | 0.704*** | 0.667** | 0.219 | 0.589* | 0.854** |
| | (0.271) | (0.271) | (0.276) | (0.317) | (0.333) |
| *District population* | 0 | 0 | 0 | 0 | 0 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Constant | 12.519*** | 12.178*** | 10.080*** | 12.778*** | 11.203*** |
| | (0.452) | (0.416) | (0.472) | (0.522) | (0.731) |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 40,098 | 32,502 | 7,596 | 18,447 | 21,651 |

Panel B

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm size | | Location | |
| | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Variable | | | | | |
| Log (*Government Bank Credit in 1991 +1)* | 0.081 | -0.024 | 0.247*** | -0.021 | 0.116 |
| | (0.106) | (0.089) | (0.081) | (0.124) | (0.103) |
| *Labor_Post* | 0.684** | 0.653** | 0.149 | 0.587* | 0.814** |
| | (0.269) | (0.269) | (0.267) | (0.317) | (0.324) |
| *District population* | 0 | 0 | 0 | 0 | 0 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Constant | 12.965*** | 12.593*** | 10.649*** | 13.089*** | 11.860*** |
| | (0.440) | (0.395) | (0.426) | (0.511) | (0.589) |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 40,098 | 32,502 | 7,596 | 18,447 | 21,651 |

**Table 11: Access to Credit and Employment**

Using data from the Service Sector survey, this table provides results from a OLS specification where the dependent variable is *Log (Total Workers)* at the firm level. In Panel A, Log (*Government Bank Branches in 1991* ) is the number of government-owned bank branches in a district in 1991; *Labor_Post* is the interaction between Labor regulations at the state level and a year dummy. District Population is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit* ) which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| Variable | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log (*Government Bank Branches in 1991 +1)* | 0.109** | 0.023* | 1.186*** | -0.045 | 0.163*** |
| | [0.051] | [0.012] | [0.308] | [0.058] | [0.051] |
| *Labor_Post* | -0.139 | -0.021 | 0.260 | -0.219* | -0.086 |
| | [0.107] | [0.026] | [0.684] | [0.131] | [0.126] |
| *District population* | 0.000 | -0.000* | -0.000 | 0.000 | 0.000 |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Constant | 3.639*** | 2.489*** | 6.784*** | 4.209*** | 4.669*** |
| | [0.409] | [0.154] | [1.275] | [0.388] | [0.718] |
| Industry FE | | | | | |
| State FE | | | | | |
| Number of observations | 296,684 | 268,558 | 28,126 | 114,261 | 182,423 |

Panel B

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| Variable | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log (*Government Bank Credit in 1991 +1)* | 0.095*** | 0.017*** | 0.738*** | 0.015 | 0.090*** |
| | [0.022] | [0.005] | [0.179] | [0.024] | [0.024] |
| *Labor_Post* | -0.157 | -0.024 | 0.075 | -0.228* | -0.102 |
| | [0.105] | [0.026] | [0.680] | [0.134] | [0.126] |
| *District population* | -0.000 | -0.000** | -0.000 | 0.000 | -0.000 |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Constant | 3.686*** | 2.493*** | 7.727*** | 4.047*** | 4.831*** |
| | [0.371] | [0.153] | [1.188] | [0.373] | [0.690] |
| Industry FE | | | | | |
| State FE | | | | | |
| Number of observations | 296,684 | 268,558 | 28,126 | 114,261 | 182,423 |

**Table 12: Access to Credit and Firm Productivity**

Using data from the Service Sector survey, this table provides results from a OLS specification where the dependent variable is *Value Added per worker* at the firm level. In Panel A, Log (*Government Bank Branches in 1991*) is the number of government-owned bank branches in a district in 1991; *Labor_Post* is the interaction between Labor regulations at the state level and a year dummy. District Population is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit*) which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| Variable | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log (*Government Bank Branches in 1991 +1)* | 0.069** | 0.056 | 0.202*** | -0.058 | 0.106*** |
| | (0.034) | (0.034) | (0.042) | (0.045) | (0.027) |
| *Labor_Post* | -0.131** | -0.147** | 0.164 | -0.197** | -0.066 |
| | (0.065) | (0.064) | (0.112) | (0.079) | (0.062) |
| *District population* | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Constant | 10.821*** | 10.053*** | 9.934*** | 10.921*** | 10.810*** |
| | (0.114) | (0.155) | (0.196) | (0.154) | (0.104) |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 293,853 | 265,931 | 27,922 | 113,053 | 180,800 |

Panel B

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log gov't bank credit +1 in 1991 | 0.055*** | 0.046*** | 0.147*** | -0.024 | 0.050*** |
| | (0.016) | (0.015) | (0.021) | (0.020) | (0.014) |
| labor_post | -0.141** | -0.155** | 0.133 | -0.198** | -0.077 |
| | (0.065) | (0.064) | (0.107) | (0.079) | (0.064) |
| District population 1999 | -0.000 | -0.000 | -0.000** | -0.000 | -0.000 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Constant | 10.822*** | 10.087*** | 10.108*** | 10.840*** | 10.932*** |
| | (0.084) | (0.117) | (0.145) | (0.111) | (0.086) |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 293,853 | 265,931 | 27,922 | 113,053 | 180,800 |

**Table 13: Access to Credit and Firm Wages**

Using data from the Service Sector survey, this table provides results from a OLS specification where the dependent variable is *(Log) Wages* at the firm level. In Panel A, Log (*Government Bank Branches in 1991* ) is the number of government-owned bank branches in a district in 1991; *Labor_Post* is the interaction between Labor regulations at the state level and a year dummy. District Population is the population at the district level from 2001. The specification controls for state and industry effects, and standard errors are robust. In Panel B, we use Log (*Government Bank Credit* ) which is the total credit given by government-owned bank branches in that district in 1991. ***indicates significance at the 1% level; ** indicates significance at the 5% level, and * indicates significance at the 10% level.

Panel A

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| Variable | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log (*Government Bank Branches in 1991 +1)* | 0.147** | 0.079 | 0.153*** | -0.115* | 0.182*** |
| | [0.073] | [0.069] | [0.048] | [0.066] | [0.066] |
| *Labor_Post* | 0.124 | 0.148 | 0.039 | 0.046 | 0.047 |
| | [0.118] | [0.117] | [0.107] | [0.120] | [0.123] |
| *District population* | 0.000* | 0.000* | -0.000 | 0.000 | 0.000* |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Constant | 9.740*** | 10.135*** | 9.642*** | 10.940*** | 9.699*** |
| | [0.267] | [0.293] | [0.135] | [0.266] | [0.264] |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 101,300 | 73,803 | 27,497 | 32,875 | 68,425 |

Panel B

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | | Firm Size | | Location | |
| Variable | All Firms | Firms with < 5 workers | Firms with >= 5 workers | Rural | Urban |
| Log (*Government Bank Credit in 1991+1)* | 0.139*** | 0.101** | 0.116*** | -0.034 | 0.129*** |
| | [0.048] | [0.047] | [0.021] | [0.051] | [0.038] |
| *Labor_Post* | 0.109 | 0.143 | 0.017 | 0.048 | 0.028 |
| | [0.117] | [0.117] | [0.104] | [0.121] | [0.124] |
| *District population* | 0.000 | 0.000 | -0.000 | 0.000 | 0.000 |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Constant | 9.812*** | 10.072*** | 9.724*** | 10.696*** | 9.866*** |
| | [0.228] | [0.238] | [0.111] | [0.239] | [0.205] |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes |
| Number of observations | 101,300 | 73,803 | 27,497 | 32,875 | 68,425 |

**Table A1: Distribution of Industries for Household Enterprises**

Using data from the Employment-Unemployment Survey, this table provides results the distribution of industry activities for individuals reporting working for or running a household enterprise

| | | | | |
|---|---|---|---|---|
| Agriculture, hunting, forestry & fishing | 65.5% | 418,380 | 65.53 | 65.53 |
| Mining and quarrying | 3.2% | 20,464 | 3.21 | 68.73 |
| Manufacturing | 5.3% | 34,013 | 5.33 | 74.06 |
| Electricity, gas and water | 1.8% | 11,279 | 1.77 | 75.83 |
| Construction | 1.0% | 6,494 | 1.02 | 76.85 |
| Wholesale and retail trade, restaurants | 9.7% | 61,856 | 9.69 | 86.53 |
| Transport, storage & communication | 8.0% | 51,390 | 8.05 | 94.58 |
| Financing, insurance, real estate and b | 1.3% | 8,602 | 1.35 | 95.93 |
| Services community, social & personal services | 0.9% | 6,054 | 0.95 | 96.88 |
| Community, social & personal services | 3.1% | 19,929 | 3.12 | 100 |