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A Appendix of Chapter 3

A.1 Computing the gradient

The problem to be solved is:

$$\max_{\substack{\{\alpha_j\}_{j=1}^{M},\mu_s,\mu_a,\bar{p},\\ k_1,k_2,\beta_{EI},\beta_{BP},b}} \quad \mathbb{E}_{\underline{r}}\mathcal{L}(\{\alpha_j\}_{j=1}^{M},\mu_s,\mu_a,\bar{p},k_1,k_2,\beta_{EI},\beta_{BP},b,\underline{r}|\mathbf{D},\mathbf{L},\mathbf{EI},\mathbf{BP},\mathbf{x},\rho,\tau)$$

$$\text{subject to} \quad \begin{array}{c} 0 \le \mu_a \cdot \alpha_j + \bar{p} \le 1 \\ \beta_{EI},\beta_{BP} \in [0,1] \\ k_1,k_2 \in \mathbb{R}^{+*} \end{array}$$

Tacking the log-likelihood function as:

$$\ln \mathcal{L}(\{\alpha_j\}_{j=1}^{M},\mu_s,\mu_a,\bar{p},k_1,k_2,\beta_{EI},\beta_{BP},b,\underline{r}|\mathbf{D},\mathbf{L},\mathbf{EI},\mathbf{BP},\mathbf{x},\rho,\tau) = \sum_{i=1}^{N} \ln(Pr(D=1)) \cdot \mathbb{I}_{D_i=1} + \ln(Pr(D=0)) \cdot \mathbb{I}_{D_i=0}$$

with $Pr(D=1) = 1-(\frac{1}{1+e^{-(\mu_s\cdot\alpha_{j(i)}+x_i b)}})[1-F(g(L_i,\rho,\underline{r},\alpha_{j(i)},\mu_a,\bar{p},\tau,I_i),k_1,k_2)]$,

$g(L,\rho,\underline{r},\alpha,\mu_a,\bar{p},\tau,I) \equiv \frac{[\rho-\underline{r}-(\mu_a\cdot\alpha+\bar{p})(\rho-\underline{r}+\tau)]L-(1-\mu_a\cdot\alpha-\bar{p})\min(I,(\rho-\underline{r})L)}{(\mu_a\cdot\alpha+\bar{p})}$,

$I = \beta_{EI} \cdot EI + \beta_{BP} \cdot BP$,

and ϕ has a log-normal distribution:

$$F(x,k_1,k_2) := \int^{x} \frac{\mathrm{e}^{-1/2\,\frac{(\ln(u)-k_1)^2}{{k_2}^2}}}{u\cdot k_2\sqrt{2\cdot\pi}}du; f(x,k_1,k_2) = \frac{\mathrm{e}^{-1/2\,\frac{(\ln(x)-k_1)^2}{{k_2}^2}}}{x\cdot k_2\sqrt{2\cdot\pi}}$$

Partial derivative of $\ln \mathcal{L}$ in $\theta \in \{\{\alpha_j\}_{j=1}^{M}, \mu_a, \bar{p}, k_1, k_2, \beta_{EI}, \beta_{BP}, b\}$ is:

$$\frac{d \ln \mathcal{L}}{d\theta} = \mathbb{I}_{D_i=1} \cdot \frac{\frac{dPr(D=1)}{d\theta}}{Pr(D=1)} - \mathbb{I}_{D_i=0} \cdot \frac{\frac{dPr(D=1)}{d\theta}}{1 - Pr(D=1)}$$

Partial derivatives of probability of success $p_s(\mu_s, \alpha, x, b) = \frac{1}{1+e^{-(\mu_s \cdot \alpha + xb)}}$ are:

$$\frac{dp_s(\mu_s, \alpha, x, b)}{d\mu_s} = \alpha \cdot \frac{e^{-(\mu_s \cdot \alpha + xb)}}{(1 + e^{-(\mu_s \cdot \alpha + xb)})^2}$$

$$\frac{dp_s(\mu_s, \alpha, x, b)}{d\alpha} = \mu_s \cdot \frac{e^{-(\mu_s \cdot \alpha + xb)}}{(1 + e^{-(\mu_s \cdot \alpha + xb)})^2}$$

$$\frac{dp_s(\mu_s, \alpha, x, b)}{db} = x \cdot \frac{e^{-(\mu_s \cdot \alpha + xb)}}{(1 + e^{-(\mu_s \cdot \alpha + xb)})^2}$$

Partial derivatives of misreporting threshold $g(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)$ are:

$$\frac{dg(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)}{d\bar{p}} = \begin{cases} 0 & \text{if } I \geq L(\rho - \underline{r}) \\ \frac{I - L\cdot(\rho - \underline{r})}{(\mu_a \cdot \alpha + \bar{p})^2} & \text{if } I < L(\rho - \underline{r}) \end{cases}$$

$$\frac{dg(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)}{d\alpha} = \mu_a \cdot \frac{dg(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)}{d\bar{p}}$$

$$\frac{dg(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)}{d\mu_a} = \alpha \cdot \frac{dg(L, \rho, \underline{r}, \alpha, \mu_a, \bar{p}, \tau, I)}{d\bar{p}}$$

Partial derivatives in μ_a and $\bar{p}$

The partial derivatives of the probability of delay in the probability of detecting misreporting parameters (μ_a and $\bar{p}$) are:

$$\frac{dPr(D=1)}{d\mu_a} = p_s(\mu_s, \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[f(g(\mu_a, ...), k_1, k_2) \cdot \frac{dg(\mu_a, ...)}{d\mu_a}]$$

and

$$\frac{dPr(D=1)}{d\bar{p}} = p_s(\mu_s, \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[f(g(\bar{p}, ...), k_1, k_2) \cdot \frac{dg(\bar{p}, ...)}{d\bar{p}}]$$

Partial derivative in α_1, . . . , α_M

The partial derivatives of the probability of delay in the officers ability coefficient (α_1, . . . , α_M) are:

$$\frac{dPr(D=1)}{d\alpha_j} = -\frac{dp_s(\mu_s \cdot \alpha_j, x, b)}{d\alpha_j} \cdot (1 - \mathbb{E}_{\underline{r}} F(g(\alpha_j, ...), k_1, k_2)) + p_s(\mu_s \cdot \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[f(g(\alpha_j, ...), k_1, k_2) \cdot \frac{dg(\alpha_j, ...)}{d\alpha_j}]$$

Partial derivative in k_1 and k_2

The partial derivatives of the probability of delay in the log-normal distribution parameters (k_1 and k_2) are:

$$\frac{dPr(D=1)}{dk_1} = p_s(\mu_s, \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[-\frac{\mathrm{e}^{-1/2\,\frac{(\ln(g(...))-k_1)^2}{{k_2}^2}}}{k_2\sqrt{2\cdot\pi}}]$$

and

$$\frac{dPr(D=1)}{dk_2} = p_s(\mu_s, \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[\frac{\mathrm{e}^{-1/2\,\frac{(\ln(g(...))-k_1)^2}{k_2^2}}}{k_2\sqrt{2\cdot\pi}} \cdot (\ln(g(...)) - k_1)]$$

Partial derivative in β_{EI} and β_{BP}

$$\frac{dPr(D=1)}{d\beta_n} = p_s(\mu_s, \alpha_j, x, b) \cdot \mathbb{E}_{\underline{r}}[f(g(I_i, ...), k_1, k_2) \cdot \mathbb{I}_{[I_i<(\rho-\underline{r})L_i]} \cdot \frac{(\mu_a \cdot \alpha_j + \bar{p} - 1)}{\mu_a \cdot \alpha_j + \bar{p}} \cdot n]$$

with $n = EI, BP$

Partial derivative in b and μ_s

$$\frac{dPr(D=1)}{dm} = (\mathbb{E}_{\underline{r}} F(g(L_i, \rho, \underline{r}, \alpha_j, \mu_a, \bar{p}, \tau, I_i), k_1, k_2) - 1) \cdot \frac{dp_s(\mu_s, \alpha_j, x, b)}{dm}$$

with $m = b, \mu_s$

A.2 Maximum Likelihood without aggregation

Table A.1: Maximum likelihood estimates (without aggregation)

Estimated α 's								
α_1	0.0002***	(0.0959)	α_{14}	0.3818	(0.2455)	α_{28}	−0.0507***	(0.0784)
α_2	−1.1437***	(0.2304)	α_{15}	0.1260**	(0.1332)	α_{29}	−0.4261***	(0.0391)
α_3	−0.0381***	(0.0953)	α_{16}	−0.1786***	(0.0906)	α_{30}	1	
α_4	0.0222***	(0.0290)	α_{17}	0.0896***	(0.0735)	α_{31OB}	−1.0277**	(0.7224)
α_5	0.1506***	(0.0902)	α_{18}	0.1324***	(0.0859)	α_{31MB}	−0.6214***	(0.0538)
α_6	−0.2067***	(0.0256)	α_{19}	0.2049**	(0.1091)	α_{32}	0.4076***	(0.0359)
α_7	0		α_{20}	0.7518	(0.2888)	α_{33}	0.5497	(0.0960)
α_8	−0.1009***	(0.0369)	α_{21}	0.4970	(0.3407)	α_{34}	0.3156	(0.2842)
α_9	0.1544***	(0.0953)	α_{22OB}	−0.6686***	(0.0488)	α_{35}	−0.6618***	(0.1042)
α_{10OB}	0.6840	(0.1878)	α_{22MB}	0.0642***	(0.1319)	α_{36}	0.4102*	(0.0995)
α_{10MB}	0.8109	(0.2536)	α_{23}	−0.1307***	(0.0300)	α_{37}	0.0015**	(0.1893)
α_{11OB}	−0.2542***	(0.0466)	α_{24}	−0.3412***	(0.1051)	α_{38}	−0.9503***	(0.0397)
α_{11MB}	−0.0075***	(0.0898)	α_{25}	0.4815	(0.2416)	α_{39}	−0.3939***	(0.0243)
α_{12}	−0.5469***	(0.0534)	α_{26}	0.3441	(0.4007)	α_{40OB}	−0.1586***	(0.0262)
α_{13}	−0.5881***	(0.0096)	α_{27}	0.2912*	(0.1315)	α_{40MB}	−0.1933***	(0.0273)
Probability of misreporting : Audit, Available Income and ϕ Distribution								
μ_a	0.2266**	(0.0101)	β_{RE}	0.8267***	(0.0614)	k_1	68.13	(3868197)
$\bar{p}$	0.6050***	(0.0084)	β_{RB}	0.0431***	(0.0000)	k_2	41.14	(1410992)
Probability of success parameters (b,μ_s)								
Context: Sector, Guarantor and Current account and Year								
μ_s	2.0890*	(1.5089)	Repay	−1.1298***	(0.0058)	2002	−2.1693***	(0.0175)
Trade	0.0301	(0.0024)	1997	−1.6295***	(0.0624)	2003	−1.2127***	(0.0179)
Agric.	−0.0081	(0.0274)	1998	−1.5671***	(0.0331)	2004	−0.5524***	(0.0201)
Other	−0.8295***	(0.0190)	1999	−1.9833***	(0.0270)	2005	−0.5895***	(0.0173)
No Guar.	0.1755	(0.0121)	2000	−2.2779***	(0.0202)	2006	−0.7499***	(0.0162)
C. Ac.	0.7057***	(0.0232)	2001	−2.3624***	(0.0196)	2007	0	
Comparing client / credit officer: Gender, Marital Status, Have Dependents, Age								
Is a Female			Is Married			Has Dependent(s)		
Yes/Yes	−0.2798	(0.0789)	No/No	−2.4118***	(0.2123)	No/No	0.7167*	(0.1680)
Yes/No	0.1561**	(0.0046)	Yes/No	−2.0459***	(0.2148)	Yes/No	0.8242**	(0.1676)
No/Yes	−0.4683*	(0.0789)	No/Yes	−0.5353***	(0.0054)	No/Yes	−0.0812	(0.0047)
Age	0.0229***	(0.00001)	< 10 y.	0.0751	(0.0035)	Cons.	3.9424***	(0.4468)

Wald test: α's not compared to 0 but to the highest α (= 1).

*** p<0.01, ** p<0.05, * p<0.1.; Standard errors in parenthesis.

B Appendix of Chapter 4

Table B.1: Approved proportion (LS/RA) regressions

LS/RA	(1)	(2)	(3)
Female client	-0.606*	-0.891***	-1.631***
	(0.309)	(0.305)	(0.294)
Requested amount (RA)			-0.00713***
			(0.000141)
External income/RA		9.524***	6.339***
		(0.332)	(0.326)
Business profit/RA		0.491***	0.350***
		(0.0354)	(0.0342)
Married client	1.741***	1.436***	1.920***
	(0.321)	(0.316)	(0.305)
Client with dependent(s)	0.762**	0.498	0.842***
	(0.323)	(0.318)	(0.307)
Client's age	0.151***	0.113***	0.0894***
	(0.0131)	(0.0130)	(0.0125)
# of former loans at Vivacred	1.832***	1.833***	2.069***
	(0.0531)	(0.0523)	(0.0506)
# of times as a guarantor	0.437***	0.424***	0.587***
	(0.0766)	(0.0754)	(0.0728)
# of past delays	-7.470***	-7.451***	-9.184***
	(0.789)	(0.778)	(0.750)
Guarantor involved	-2.211***	-0.538	2.340***
	(0.598)	(0.592)	(0.573)
Female Guarantor	-2.976***	-2.526***	-2.103***
	(0.326)	(0.321)	(0.310)
Loan repayment	10.80***	10.80***	9.913***
	(0.558)	(0.550)	(0.530)
# of installments	0.136***	0.282***	0.751***
	(0.0366)	(0.0363)	(0.0362)
Capital investment	0.975***	1.354***	2.640***
	(0.346)	(0.342)	(0.330)
# of employees	0.173**	0.228***	0.694***
	(0.0732)	(0.0722)	(0.0702)
Trade (sector)	-0.640**	-0.539*	-0.989***
	(0.321)	(0.317)	(0.305)
Official business	-0.139	0.507	9.042***
	(0.679)	(0.670)	(0.668)
Constant	53.75***	49.69***	59.19***
	(1.966)	(1.942)	(1.881)
Observations	33530	33530	33530
R^2	0.126	0.151	0.212

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1
Additional controls: Years and branches dummies

Table B.2: Loan size regression by period (guarantor income inclusion)

	(1)	(2)	(3)	(4)	(5)	(6)
Loan size	OLS	OLS	OLS	PLS	PLS	PLS
Period	97-04	97-04	97-04	05-07	05-07	05-07
Female client	-40.55***	-18.57**	-15.82**	-122.1***	-57.49***	-48.20***
	(8.208)	(8.117)	(7.998)	(8.284)	(8.560)	(7.993)
Requested amount (RA)	0.587***	0.525***	0.504***			
	(0.00364)	(0.00458)	(0.00463)			
Residual RA (RRA)				0.584***	0.504***	0.504***
(by period)				(0.00370)	(0.00495)	(0.00463)
Guarantor Income			0.163***			0.351***
			(0.00787)			(0.00767)
Married client	30.54***	-14.25*	-7.800	50.26***	2.543	14.99*
	(8.405)	(8.386)	(8.268)	(8.498)	(8.850)	(8.266)
Client with dependent(s)	25.32***	4.099	8.026	13.59	25.87***	32.45***
	(8.552)	(8.321)	(8.201)	(8.647)	(8.780)	(8.198)
Client's age	0.994***	0.986***	1.004***	-2.362***	-1.979***	-1.683***
	(0.349)	(0.342)	(0.337)	(0.353)	(0.360)	(0.336)
External income	0.0868***	0.158***	0.145***	0.322***	0.330***	0.287***
	(0.0106)	(0.0115)	(0.0113)	(0.0106)	(0.0120)	(0.0113)
# of former loans at Vivacred	54.59***	32.99***	31.88***	76.16***	42.45***	39.23***
	(1.641)	(1.159)	(1.143)	(1.654)	(1.220)	(1.141)
# of times as a guarantor	17.54***	9.351***	6.619***	28.74***	14.35***	8.032***
	(2.627)	(1.600)	(1.582)	(2.656)	(1.688)	(1.582)
# of former loans with delay	-174.9***	-122.0***	-111.4***	-320.5***	-176.0***	-148.3***
	(21.08)	(21.73)	(21.41)	(21.30)	(22.93)	(21.41)
Guarantor involved	-26.14	85.93***	31.20**	248.7***	197.5***	69.87***
	(18.78)	(14.16)	(14.20)	(18.91)	(14.91)	(14.20)
Male Guarantor	23.91***	50.83***	29.96***	90.66***	117.5***	66.79***
	(8.401)	(8.495)	(8.430)	(8.484)	(8.945)	(8.424)
Loan repayment	174.2***	141.0***	141.8***	-70.42***	137.0***	138.9***
	(25.52)	(10.63)	(10.47)	(25.76)	(11.21)	(10.47)
# of installments	25.46***	17.39***	17.36***	65.33***	46.67***	44.07***
	(0.948)	(1.009)	(0.994)	(0.926)	(1.030)	(0.963)
Capital investment	35.38***	95.12***	96.14***	129.6***	221.5***	212.7***
	(8.955)	(9.520)	(9.379)	(9.036)	(9.980)	(9.318)
Business profit	0.0601***	0.0811***	0.0704***	0.207***	0.204***	0.171***
	(0.00311)	(0.00367)	(0.00366)	(0.00300)	(0.00371)	(0.00354)
# of employees	8.078***	19.81***	20.20***	40.12***	61.42***	58.67***
	(1.569)	(4.061)	(4.001)	(1.573)	(4.269)	(3.985)
Trade (sector)	-28.93***	14.76*	19.09**	-87.17***	9.256	19.06**
	(8.509)	(8.373)	(8.252)	(8.596)	(8.837)	(8.252)
Official business	226.5***	66.53***	60.48***	802.0***	432.2***	387.5***
	(16.93)	(22.34)	(22.01)	(16.73)	(23.33)	(21.80)
Constant	-276.3***	-381.9***	-357.6***	169.9***	-278.0***	-234.8***
	(35.17)	(22.25)	(21.96)	(35.45)	(23.47)	(21.93)
Year dummies	98-04	06-07	06-07	98-04	06-07	06-07
Observations	19621	14229	14229	19621	14229	14229
R^2	0.738	0.665	0.674	0.732	0.626	0.674

Monetary variables are measured in deflated BRL

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

C Appendix of Chapter 5

Table C.1: Gender gap in the "borrowing team" (complete)

	(1) Approval	(2) LS	(3) Delay	(4) Default	(5) Loss
Number of females	0.00901***	2.962	-0.00721***	-0.00249***	-2.813***
	(0.000792)	(2.585)	(0.00150)	(0.000399)	(0.882)
Number of males	0.00943***	15.57***	-0.00275**	-0.00108***	0.116
	(0.000762)	(2.550)	(0.00137)	(0.000357)	(0.871)
Test (coefficient equality): Number of female = Number of male					
$\chi^2(1)$	0.31	38.36***	18.60***	20.07***	17.81***
mills or athrho		***	Ns	Ns	*
LS	No	No	Yes	Yes	Yes
Other controls	Yes	Yes	Yes	Yes	Yes
Observations	33530	33530	33530	33530	33530

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Heckman's selection: committee approval, marginal effect for col. (1), (3) and (4).

Table C.2: Main empirical result with loan repayment collapsed

	Approval	L	[illegible]	[illegible]	ult (180 days)		Loss	
Female client	-0.00166	-30.2	[illegible]	[illegible]	***	-0.00331***	-5.829***	-5.788***
	(0.00187)	(5.514)	(0.00269)	(0.00276)	(0.000989)	(0.00109)	(1.982)	(1.983)
LS				-2.82e-05***		-8.17e-06***		0.00136
				(3.05e-06)		(1.83e-06)		(0.00210)
RA	-9.50e-06***	0.618***	5.21e-06***	2.06e-05***	1.75e-06**	5.88e-06***	0.0105***	0.00967***
	(8.70e-07)	(0.00312)	(1.34e-06)	(2.19e-06)	(6.95e-07)	(1.42e-06)	(0.00112)	(0.00171)
Married client	0.00298	27.67***	-0.0245***	-0.0242***	-0.00574***	-0.00602***	-8.953***	-8.991***
	(0.00193)	(5.716)	(0.00288)	(0.00295)	(0.00131)	(0.00144)	(2.055)	(2.056)
Client with dependent(s)	0.00352*	6.826	-0.00191	-0.00189	-0.000400	-0.000490	-4.976**	-4.986**
	(0.00195)	(5.763)	(0.00279)	(0.00287)	(0.000949)	(0.00102)	(2.070)	(2.070)
Client's age	0.000234***	0.500**	-0.000962***	-0.000974***	-0.000188***	-0.000198***	-0.317***	-0.318***
	(8.01e-05)	(0.238)	(0.000121)	(0.000124)	(5.14e-05)	(5.65e-05)	(0.0856)	(0.0857)
Guarantor involved	0.0449***	-15.65	-0.00825	-0.00837	-0.00685**	-0.00788**	-16.25***	-16.23***
	(0.00330)	(13.54)	(0.00650)	(0.00663)	(0.00311)	(0.00348)	(4.852)	(4.851)
# of installments	-0.00152***	25.02***	0.00184***	0.00264***	0.000611***	0.000839***	2.058***	2.025***
	(0.000215)	(0.721)	(0.000339)	(0.000360)	(0.000169)	(0.000215)	(0.258)	(0.263)
Capital investment	0.0149***	29.95***	-0.00761**	-0.00683**	-0.00351**	-0.00359**	-11.35***	-11.39***
	(0.00215)	(6.638)	(0.00308)	(0.00316)	(0.00142)	(0.00154)	(2.382)	(2.382)
Loan repayment	0.206***	33.89	0.162***	0.168***	0.0267***	0.0282***	55.81***	55.75***
	(0.0153)	(24.37)	(0.00780)	(0.00800)	(0.00280)	(0.00300)	(8.698)	(8.698)
External income	1.78e-05***	0.0827***	-9.87e-06***	-8.71e-06**	-7.42e-06***	-7.35e-06***	-0.00762***	-0.00774***
	(2.83e-06)	(0.00795)	(3.62e-06)	(3.75e-06)	(2.34e-06)	(2.53e-06)	(0.00285)	(0.00285)
Business profit	4.74e-06***	0.0555***	-2.51e-07	1.05e-06	3.66e-08	3.45e-07	0.000504	0.000428
	(5.13e-07)	(0.00261)	(9.48e-07)	(1.12e-06)	(3.69e-07)	(4.08e-07)	(0.000933)	(0.000940)
Trade (sector)	0.0100***	-20.75***	0.000884	0.000183	0.00162*	0.00147	-2.071	-2.044
	(0.00193)	(5.908)	(0.00278)	(0.00286)	(0.000944)	(0.00102)	(2.118)	(2.119)
Official business	0.000113	180.4***	0.00692	0.0143**	-0.00109	0.000779	-0.409	-0.655
	(0.00436)	(12.63)	(0.00570)	(0.00594)	(0.00240)	(0.00262)	(4.541)	(4.556)
# of employees	0.00217***	10.37***	0.000414	0.000753	7.23e-05	0.000167	0.354	0.340
	(0.000605)	(1.285)	(0.000555)	(0.000536)	(0.000297)	(0.000288)	(0.463)	(0.463)
# of former loans at Vivacred	0.00481***	33.58***	-0.0152***	-0.0136***	-0.00392***	-0.00373***	-2.939***	-2.985***
	(0.000438)	(1.076)	(0.000888)	(0.000893)	(0.000736)	(0.000774)	(0.386)	(0.393)
# of times acted as a guarantor	-0.000214	8.185***	-0.00640***	-0.00599***	-0.00179***	-0.00180***	-1.452***	-1.463***
	(0.000512)	(1.355)	(0.00117)	(0.00119)	(0.000472)	(0.000511)	(0.487)	(0.487)
# of past delays	-0.0301***	-147.8***	0.131***	0.129***	0.0271***	0.0282***	81.12***	81.32***
	(0.00476)	(16.06)	(0.00739)	(0.00741)	(0.00504)	(0.00561)	(5.757)	(5.765)
Female credit officer	-0.00949***	-33.33***	0.0113***	0.0105***	0.00229**	0.00228*	2.191	2.236
	(0.00197)	(5.976)	(0.00293)	(0.00300)	(0.00111)	(0.00120)	(2.147)	(2.148)
Constant		-201.1***					12.56	18.31*
		(30.55)					(7.708)	(10.27)
mills or athrho		**	Ns	Ns	Ns	Ns	***	***
Years' & branches' dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	30467	30467	30467	30467	30467	30467	30467	30467

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1, Ns non significant

Estimations based on Heckman's procedure (selection: committee approval); marginal effect at mean reported for probit regressions.

D Appendix of Chapter 6

Table D.1: Portfolio comparison among credit officer's gender

	Approved loans			All applications		
Credit officer's gender	Female	Male	diff	Female	Male	diff
Married client	0.483	0.470	0.0126*	0.481	0.468	0.0129*
Client with dependent(s)	0.515	0.529	-0.0136*	0.512	0.523	-0.0106
Client's age	42.83	41.89	0.932***	42.66	41.81	0.852***
External income	190.2	242.4	-52.29***	186.4	238.5	-52.11***
Guarantor involved	0.946	0.917	0.0291***			
# of installments	9.008	9.064	-0.0558			
Capital investment	0.324	0.317	0.00713	0.320	0.314	0.00659
Loan repayment	0.101	0.0883	0.0129***	0.0975	0.0872	0.0103**
Business profit	954.8	907.2	47.65**	940.0	890.6	49.42***
Trade (sector)	0.552	0.508	0.0437***	0.548	0.506	0.0417***
Official business	0.0567	0.0597	-0.00301	0.0570	0.0589	-0.00184
# of employees	0.680	0.584	0.0968***	0.675	0.578	0.0971***
# of former loans at VC	2.157	2.448	-0.291***	2.103	2.399	-0.296***
# of times as a guarantor	0.632	0.867	-0.235***	0.616	0.864	-0.248***
# of past delays (> 30 days)	0.0305	0.0363	-0.00577**	0.0309	0.0374	-0.00650**