

REPUBLIC OF INDONESIA

**RESULTS OF THE RURAL INVESTMENT
CLIMATE ASSESSMENT (RICA)
IN INDONESIA - *FINAL REPORT***

June 2008

Report no. 44033 - ID



THE WORLD BANK

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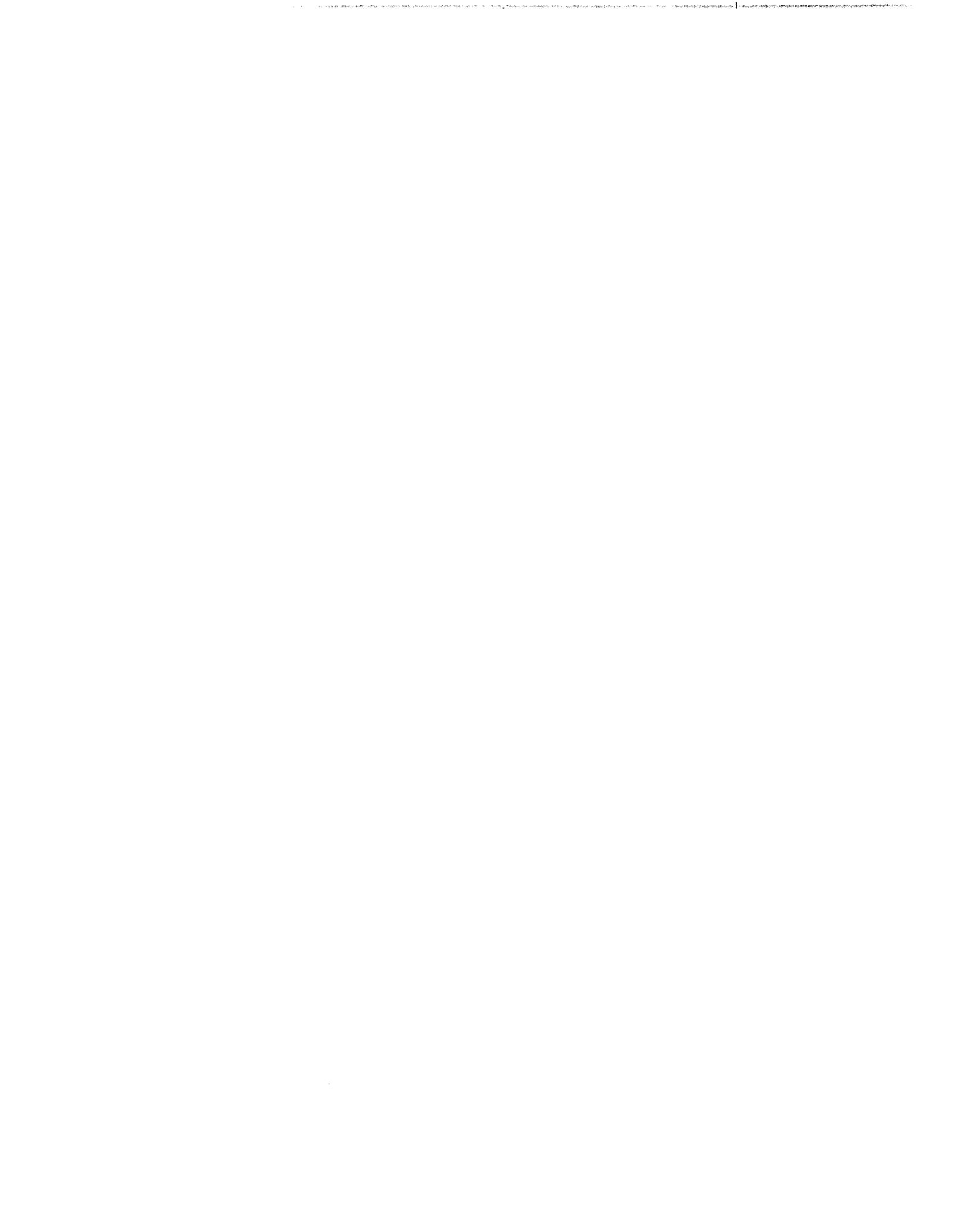
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Printed in June 2008

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ACKNOWLEDGMENTS

This report is a product of the World Bank's Rural Development, Natural Resources and Environment (EASRE) and Poverty Reduction and Economic Management (EASPR) Sector Units of the East Asia and Pacific Region.

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This study was supported by the World Bank-Dutch Trust Fund (WBDTF) for Institutional Development and Capacity Building Program to Improve Indonesia's Trade Policy.

Executive Summary

The rural investment climate survey carried out in 2006 sampled more than 2,500 predominantly very small firms in six rural districts in Indonesia [Labuhan Batu (North Sumatra), Kutai (East Kalimantan), Barru (South Sulawesi), Malang (East Java), Badung (Bali), Sumbawa (NTB)]. It compiled information on labor force, credit, infrastructure, marketing and competition, the diffusion of technical knowledge, local governance and the main obstacles that firms face.

The key findings are:

- There is a strong rural-urban divide in educational attainment of workers and huge differences between districts with Malang being particularly disadvantaged. Workers in household enterprises, the production sector and part-time workers are significantly undereducated.
- A significant percentage of enterprises are constrained by the labor market as they would like to increase their staff if they could. This is particularly so for firms in urban areas and firms with five employees or more. These firms experience a higher and increasing duration for hiring new staff. Hardly any firms ever fire staff.
- Only 13 % of all firms applied for credit in the last twelve months with most of the applications being approved; yet 54 % of all firms state that they need more funds to increase capital and to purchase materials. Rural and micro firms are particularly in need of additional funds.
- The firms are credit constrained mainly because of complicated procedures. Half of the firms that do not apply for formal loans state this as an obstacle compared to 17 % that are lacking collateral and 14 % that regard high interest rates as an obstacle.
- Insufficient collateral prevents mainly small firms from applying for loans.
- Many small firms are hugely undercapitalized; that refers to firms in the trade sector in particular.
- 36 % of all firms have no electricity with micro firms being particularly affected. Reliability of electricity is a major concern (esp. in Sumbawa), cost of electricity is another.
- Tax payments are highly skewed: Only medium and large firms pay a large share of their taxes to the central government, whereas for small and micro-enterprises the motor vehicle tax and levies from village and sub-district officials play a large role. All of the payments have a highly skewed distribution with many firms (43%) paying no levies and fees at all.
- **Major obstacles to operation and growth** of the firms are (in order of importance):
 - ~ credit constraints (mainly small and micro firms),
 - ~ demand constraints (micro- and small firms),
 - ~ bad governance, i.e. corruption, uncertain policies and restrictive regulations (all firms),
 - ~ lacking transport infrastructure (rural firms), traffic congestion (medium and large firms) and
 - ~ costly and unreliable electricity.

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APPENDIX

1. Introduction –The Indonesian Rural Investment Climate Survey

1.1 Overview

The Indonesian Rural Investment Climate Survey (RICS) is an in-depth, quantitative survey of 2549 non-farm enterprises, 2782 households and 149 communities in 6 rural districts (Kabupaten). The survey was conducted in January/February 2006 and comprised a linked survey of non-farm enterprises and households. Non-farm enterprises are defined as all enterprises except those undertaking primary agriculture, forestry and fishery activities, although firms which undertake the processing and trading of primary commodities were included. The survey includes both formal and informal businesses and examines both rural and urban areas of rural districts to generate comparative data.

Sampling Procedure: The survey used a three-stage sampling procedure in each district. Firstly, around 30 villages (*desa*) were selected in each district with the probability of selection proportional to their estimated numbers of businesses. Sample blocks were then constructed for each *desa* based on supplemental information (population and the presence of a business center), and households and businesses were selected by systematic random sampling from the lists of all structures in the selected sample blocks. Separate samples were drawn from two categories: “standalone enterprises” which are enterprises that were not located in a place of residence; and “household enterprises” which are non-farm enterprises located in a place of residence. In addition, a sample of enterprises was taken from the directory of enterprises held by the district statistical office (listed firms). The idea behind this latter selection was to ensure the inclusion of some medium or large firms, which might be very important to the local economy but which happen not to be located in the sample blocks selected.¹ Furthermore, to allow for comparisons between enterprise and non-enterprise households, a sample of “pure households” were taken from the listing of households who do not operate a non-farm enterprise and a community questionnaire was administered in each *desa* to collect village variables.² The final sample consisted of:

- 1755 Enterprise Households (i.e. with non-farm enterprises)
- 1027 Non-Enterprise Households (i.e. without non-farm enterprises)
- 619 Standalone enterprises
- 144 Directory enterprises
- 149 Communities.

Questionnaire modules/ targeted respondents: Three questionnaire modules were used:

1. Household Questionnaire, which includes questions about household demographic and economic characteristics
2. Enterprise Questionnaire, which asks detailed information about revenues, costs, and constraints faced by non-farm enterprises
3. Community Questionnaire, which details characteristics of local infrastructure and governance.

Geographical coverage: The RIC Survey was conducted in six geographically distinct districts:

1. Labuhan Batu, North Sumatra – a plantation area
2. Kutai, East Kalimantan – an area rich in mineral resources
3. Barru, South Sulawesi – a forest fringe area
4. Malang, East Java – a rich agricultural area
5. Badung, Bali – a peri-urban agglomeration area
6. Sumbawa, NTB – a dryland area

The survey was deliberately “narrow but deep” i.e. although it was only done in 6 Kabupaten(s), the sample size in each Kabupaten is large enough to ensure statistical representation at the Kabupaten level.

¹ In practice, the firms sampled from the list tended to have a similar size profile to those selected through the three stage sampling procedure

² Full details of the sampling procedures are provided in LPEM-UI (2006) [Data user guide].

1.2 The Sample in Figures

The sample of 2521 firms that are covered by Module B (questions for enterprises) is distributed almost equally across Kabupaten and the total sample consists of approximately as many rural as urban firms. Yet the distribution of urban and rural firms in the sample differs significantly across districts (see Table 1). While Badung has mostly urban firms, Labuhan Batu and Kutai have a majority of rural firms.

Table 1: Sample by size, rural-urban divide, and Kabupaten

Kabupaten	Rural – Urban			by Labor Force				Total
	Urban	Rural	Total	1-4	5-19	20-99	>=100	
Badung	360	62	422	312	80	19	4	415
Kutai K.	163	250	413	361	30	2	2	395
Sumbawa	227	194	421	359	43	6	1	409
Labuan B.	85	335	420	374	32	2	0	408
Malang	233	191	424	379	29	12	2	422
Barru	231	190	421	352	49	10	0	411
Total	1299	1222	2521	2137	263	51	9	2460

The sample focuses on micro enterprises with 87% of the sampled firms having less than 5 workers. In Barru, Malang and especially Badung larger firms have a larger weight in the sample. There are very few firms in the category of large firms (at least 100 workers), so that results for that category have to be viewed with caution.

Table 2: Sample by type of firm, sector and Kabupaten

Kabupaten	Type of Firm			Sector			Total
	Standalone	Household	Listed	Production	Trade	Services	
Badung	252	143	27	39	259	124	422
Kutai K.	57	330	26	30	221	162	413
Sumbawa	36	361	24	48	243	130	421
Labuan B.	100	298	22	39	231	150	420
Malang	90	311	23	87	177	160	424
Barru	84	313	24	40	224	157	421
Total	619	1756	146	283	1355	883	2521

Most of the firms are household enterprises (70 %), i.e. the enterprises are located in the dwelling. Stand alone enterprises (i.e. those not located in the dwelling) make up for 25 % with the rest being listed firms, that is those that are listed in the BPS sample for the 2006 census.³ In Badung/ Bali firms in business centers were mistakenly oversampled as the sampling protocol was changed. That may explain the high number of stand alone firms in this district. Likewise, Labuhan Batu and Barru mistakenly sampled only business-center census blocks, if the desa had any. As a consequence the number of stand alone businesses should be too high to be representative.⁴

The bulk of firms are in trade (54%) and services (33%), and not in production. Malang is somewhat atypical with more firms in production and less in trade compared to the average. Note that farm enterprises were excluded from the sample.

In order to inflate to population values sample weights have been used. In what follows, we report the results of the weighted procedures that make the sample representative for the respective Kabupaten. Unweighted results are available upon request.⁵

³ That does not necessarily imply that these firms are registered in a legal sense.

⁴ Data User Guide and Documentation, Indonesian Rural Investment: Climate Survey 2006, mimeo, p. 13.

⁵ A different weighting scheme makes observation representative for the entire country. Results for this – in our view less meaningful – weighting procedure are available upon request as well.

Ownership patterns are as follows:

Sole Proprietorship is by far the dominant type of ownership, they account for more than 93 percent with the remainder consisting of partnerships (3.3 %), incorporations (1.3 %), cooperatives (0.5%) and other forms (1.7%). Sole proprietorships and partnerships prevail more in rural areas than in urban areas (cf. Table 3). In urban areas, incorporations make up for two percent of the sample, but are almost non-existent in rural areas. There is a clear size effect: The share of sole proprietorships decreases strongly with size, especially beyond twenty employees. Incorporated firms tend to be large and also the share of partnerships increases with size.

Table 3: Ownership Type by region and employment group (unweighted)

Ownership Type	Region			Enterprise groups by employment				
	Urban	Rural	Total	1-4	5-19	20-99	>=100	Total
Sole Proprietorship	91.47	95.2	93.21	95.79	89.23	66.67	44.44	94
Partnership	3.02	3.57	3.28	2.21	4.1	7.14	22.22	2.65
Incorporation	2.38	0.12	1.32	0.28	3.08	21.43	33.33	1.3
Cooperatives	0.76	0.25	0.52	0.21	1.54	4.76	0	0.47
Other	2.38	0.86	1.67	1.52	2.05	0	0	1.53

Household enterprises are overwhelmingly sole proprietorships, standalone firms still have predominantly just one proprietor, but some partnerships and incorporated firms exist as well (5 and 2 percent, respectively). 11.5 % of listed firms are incorporated with another 4 percent each being cooperatives and partnerships. Sectors have similar patterns; yet trade has a larger share of sole proprietorships and incorporated firms play a role only in the production sector.

Table 4: Ownership Type by type of firm and sector (unweighted)

Ownership Type	Type of firm				Sector of firm			
	Standalone	Household	Listed	Total	Production	Trade	Services	Total
Sole Proprietorship	88.66	96.18	77.87	93.21	88.98	96.09	90.64	93.2
Partnership	5.15	2.6	4.1	3.28	4.66	2.24	4.27	3.28
Incorporation	2.06	0.08	11.48	1.32	4.24	0.56	1.31	1.32
Cooperatives	1.03	0	4.1	0.52	0.42	0	1.31	0.52
Other	3.09	1.14	2.46	1.67	1.69	1.12	2.46	1.67

2. Key Findings

In this section we present the key findings of the RICA for each sector: Labor, Credit, Infrastructure, Marketing and Competition, The Diffusion of Technical Knowledge and Local Governance.

2.1 Labor ⁶

Unpaid Labor

Firms differ in part significantly in the extent they use unpaid labor in their business. The following Table 5 gives the number of firms that have unpaid workers per category, the total number of firms in that category and the share of firms with unpaid workers in each category.

Table 5: Unpaid workers (unweighted sample)

	No. of firms that have unpaid workers	No. of firms	Share of firms with unpaid workers
Kabupaten			
Badung	187	422	0.44
Kutai	173	413	0.42
Sumbawa	259	421	0.62
Labuan Batu	210	420	0.50
Malang	373	424	0.88
Barru	200	421	0.48
Region			
Urban	682	1,299	0.53
Rural	720	1,222	0.59
Size of firm (by employment)			
1-4	1,239	2,137	0.58
5-19	147	263	0.56
20-99	15	51	0.29
>=100	1	9	0.11
Type of firm			
Standalone	299	618	0.48
HHEnterprise	1,053	1,757	0.60
Listed	50	146	0.34
Sector			
Production	159	283	0.56
Trade	793	1,355	0.59
Services	450	883	0.51
Total	1,402	2,460	0.57

The share of firms that have unpaid workers is particularly large in Malang; it is still beyond average in Sumbawa. Rural and urban firms differ not very much, but the size of the firm has a strong influence on the existence of unpaid workers as larger firms are less likely to have unpaid workers. Unsurprisingly, household enterprises have the highest share of unpaid workers, listed firms the lowest.

The average extent to which firms employ any given unpaid worker differs not very much by sector, firm size, and Kabupaten – averages are around 10.5 to 11 months per worker for the different cuts with rural firms having a lower value at 10.5 months than urban firms at 11.2 months. The median is consistently 12 months; the standard deviation however is at 2.5 months indicating a significant variation within groups. The number of days per month cluster

⁶ Aspects covered: Questionnaire ModB: Block X.A., Block X.B, Block X.C., Block XIII and Block XIII.A.

around the value 25 for all cuts and the number of hours per day worked were 8.3. There is little variation between 2002 and 2005 except for the hours worked per day – they have gone up by one hour on average.

Paid workers – full-time and part-time

Part-time workers account for 22 % of the labor force; they are significantly more frequent in Sumbawa and Barru, and in rural areas. Part-time workers have a larger share in household enterprises, in larger firms, and in production.

The overall share of female workers is higher in full-time employment than in part-time employment (39 and 25 percent, respectively), but there is a huge variation across districts and sectors.

Table 6: Full-time, part-time workers and share of female workers

	No. of workers			Share of		Female share of	
	Full-time	Part-time	Total	Full-time workers	Part-time workers	Full-time workers	Part-time workers
Kabupaten							
Badung	2376	506	2882	0.82	0.18	45.72	29.24
Kutai K	724	171	895	0.81	0.19	38.53	44.55
Sumbawa	306	188	494	0.62	0.38	18.17	25.39
L. Batu	250	88	338	0.74	0.26	31.33	32.05
Malang	1228	170	1398	0.88	0.12	31.94	8.87
Barru	411	365	776	0.53	0.47	17.95	4.03
Region							
Urban	3981	926	4907	0.81	0.19	39.66	35.99
Rural	1314	562	1876	0.70	0.30	35.37	12.07
Size of firm (by employment)							
1-4	645	99	744	0.87	0.13	43.05	28.71
5-19	1232	351	1583	0.78	0.22	32.59	23.32
20-99	1271	685	1956	0.65	0.35	34.78	13.08
>=100	2147	353	2500	0.86	0.14	50.92	37.69
Type of firm							
Standalone	1323	293	1616	0.82	0.18	42.16	28.47
HHEnterprise	763	407	1170	0.65	0.35	33.73	22.65
Registered	3209	788	3997	0.80	0.20	31.01	24.81
Sector							
Production	2199	1041	3240	0.68	0.32	23.43	8.25
Trade	1861	206	2067	0.90	0.10	44.42	22.42
Services	1235	241	1476	0.84	0.16	36.76	33.85
Total	5295	1488	6783	0.78	0.22	38.67	24.77

Full-time workers are significantly better educated than part-time workers. While half of all full-time workers have finished high school, less than a third of part-time workers have the same educational attainment. Likewise, around five percent of full-time workers are illiterate, for part-time workers the figure is twice as high (cf. Tables 7 and 8).

There is strong regional divide in educational attainment: For instance, rural workers are much more likely to be illiterate than urban workers (9 percent versus 4 percent for full-time workers and 19 % versus 6 % for part-time workers). They are much less likely to have finished high school – while 56 % of urban full-time workers have finished high school, only 29 % of their rural counterparts have the same qualification. For part-time workers the difference is even more pronounced.

Larger firms tend to have a substantially better educational profile of their work force than smaller firms. Educational attainment is particularly low in household enterprises and in the production sector.

There are significant differences at the Kabupaten level. Firms in Badung and Barru have relatively highly educated full-time employees, whereas Kutai has a large share of illiterate workers. Malang stands out with a very high percentage of illiterate full-time workers (17 %) and a very low percentage of high school graduates of only 14 %.

Table 7: Full-time workers by educational level (weighted sample)

Full-time workers (in percent)				
	Illiterate	Unfinished elementary school	Finished elementary/ junior high school	Finished high school or more
Kabupaten				
Badung	3.05	5.54	30.78	60.64
Kutai K.	10.08	18.36	35.54	36.02
Sumbawa	3.87	6.33	60.46	29.34
L. Batu	3.11	9.05	56.14	31.70
Malang	16.46	26.34	43.12	14.08
Barru	6.14	12.82	33.92	47.11
Region				
Urban	4.36	9.46	30.64	55.54
Rural	8.86	11.18	51.57	28.40
Size of firm (by employment)				
1-4	6.87	9.85	36.59	46.69
5-19	3.49	10.05	35.39	51.07
20-99	2.05	7.22	14.41	76.32
>=100	0.92	13.98	20.22	64.88
Type of firm				
Standalone	4.95	5.41	27.81	61.83
HHEnterprise	6.06	16.44	46.68	30.82
Listed	3.73	3.10	28.25	64.92
Sector				
Production	11.10	19.07	44.88	24.96
Trade	4.62	6.79	34.81	53.78
Services	4.60	10.56	33.41	51.43
Total	5.39	9.85	35.44	49.32

The picture largely carries over to part-time workers, except for their overall lower educational attainment. The rural-urban divide and the size effect are stronger than for full-time workers; likewise household enterprises have an even worse educational profile compared to other type of firms and so has the production sector compared to services and trade.

Malang still stands out as a particularly undereducated district, but the share of illiterate workers is even higher in Kutai Kertanegara and particularly in Barru (30 %). Barru and Malang have a very low number of high school graduates among their part-time workers.

Table 8: Part-time workers by educational level (weighted sample)

Part-time workers (in percent)				
	Illiterate	Unfinished elementary school	Finished elementary/junior high school	Finished high school or more
Kabupaten				
Badung	5.06	23.46	24.51	46.98
Kutai K.	17.00	7.83	41.93	33.24
Sumbawa	10.84	38.98	35.57	14.61
L. Batu	0.00	20.33	39.52	40.15
Malang	10.95	27.82	60.93	0.30
Barru	30.05	30.20	35.24	4.51
Region				
Urban	5.72	14.50	31.58	48.20
Rural	18.52	36.04	34.22	11.22
Size of firm (by employment)				
1-4	11.66	32.54	34.41	21.40
5-19	12.25	21.19	30.05	36.52
20-99	4.33	9.00	61.43	25.23
>=100	0.00	0.00	46.02	53.98
Type of firm				
Standalone	5.39	15.90	18.17	60.54
HHEnterprise	15.35	29.66	41.08	13.91
Listed	9.54	11.07	47.76	31.63
Sector				
Production	14.04	26.56	50.74	8.66
Trade	14.72	35.52	32.27	17.49
Services	8.15	14.35	25.65	51.85
Total	11.72	24.60	32.82	30.86

Hiring and firing

The employment dynamics differs significantly across Kabupaten and firm sizes. Table 9 shows the percentage of firms that have hired new *skilled* labor in 2005 and 2002

Table 9: Share of firms that hired skilled labor (in shares, weighted sample)

Year	2005	2002
Kabupaten		
Badung	0.080	0.036
Kutai Kertanegara	0.066	0.059
Sumbawa	0.013	0.015
Labuan Batu	0.034	0.019
Malang	0.001	0.002
Barru	0.004	0.002
Region		
Rural	0.020	0.014
Urban	0.057	0.028
Size of firm (by employment)		
1-4	0.014	0.017
5-19	0.155	0.036

20-99	0.601	0.261
>=100	0.522	0.506
Type of firm		
Stand alone	0.094	0.029
HHEnterprise	0.020	0.018
Listed	0.122	0.136
Total	0.038	0.020

There is a substantial amount of variation, also over time, between districts in the percentage of firms that hired skilled labor with Badung, Kutai and to a lesser extent Labuan Batu hiring more than Barru and Malang. Firms in urban areas are more than double as likely to hire skilled labor. Most importantly, there is a very strong size effect! More than half of all firms with 20 workers or more stated that they had hired skilled labor in 2005, whereas only 16 % of firms with 5 to 19 workers and only one percent of firms with less than five workers had done so. Unsurprisingly, listed firms are significantly more likely to hire skilled workers than standalone firms, which in turn are more likely than household enterprises to do so. These results mirror the existing educational profile (see above). Sectoral differences are negligible.

Also, the time to hire and fire a worker differs substantially, pointing to different local labor markets and different regulations/customs.

Table 10: Average number of days to hire and fire employees (weighted sample)

Average number of days to				
	Hire a new employee		Fire an employee	
	2005	2002	2005	2002
Kabupaten				
Badung	15.8	4.3	21.6	30.4
Kutai K.	4.9	6.4	7.9	7.9
Sumbawa	12.6	11.6	3.2	4.3
Labuan Batu	7.9	1.5	10.6	9.2
Malang	1.6	2.6	4.0	27.0
Barru	5.1	0	1.6	
Region				
Urban	14.4	4.0	5.1	23.8
Rural	7.3	6.3	11.3	13.3
Size of firm				
1-4	5.2	2.4	3.7	10.9
5-19	15.3	11.4	18.1	11.8
20-99	17.9	8.0	12.8	56.5
>=100	13.7	14.1	30	30
Type of firm				
Standalone	14.0	6.4	13.8	24.9
HHEnterprise	10.0	4.0	5.6	12.8
Registered	16.5	11.8	18.7	23.8
Sector				
Production	16.8	6.1	8.6	25.0
Trade	8.6	4.0	3.0	34.2
Services	16.8	5.1	11.3	6.9
Total	12.4	4.9	8.9	16.7

Overall, the time to find a new employee has increased dramatically from 5 days to more than 12 days. Behind this increase is hidden a wide variety of different labor market situations.

In Kutai, Malang, and Barru firms find new employees very easily; it takes them no more than 5 days, in Sumbawa and Badung it takes 13 and 16 days, respectively. In Badung in particular, but also in Labuan Batu things have changed to the worse from the business perspective, indicating a change in labor market situation (higher employment). This "deterioration" from the employers' perspective has predominantly been an urban phenomenon, where time requirement has gone up by ten days whereas it has remained almost the same in rural areas.

Moreover, household enterprises and very small firms (below 5 workers) find it significantly easier to hire workers and so do trade firms.

Long durations to find new workers indicate disequilibrium in the labor market. People were asked how they would like to change their number of employees if they could do so freely.

Table 13: Desired changes in employment (in shares, weighted sample)

	Want to hire more people	No change	Reduce no. of employees
Kabupaten			
Badung	.14	.85	.014
Kutai	.12	.87	.006
Sumbawa	.095	.90	.009
Labuan Batu	.041	.96	.003
Malang	.019	.98	0.001
Barru	.035	.95	.016
Region			
Urban	.11	.88	.016
Rural	.051	.95	.003
Firm size			
1-4	.0595	.9358	.0047
5-19	.1604	.8066	.033
20-99	.1742	.7405	.0853
100 or more	.3178	.5557	.1265
Type of firm			
Standalone	.1512	.8436	.0052
HHEnterprise	.0546	.9351	.0104
Listed	.081	.8852	.0338
Total	.078	.91	.009

Especially in those districts where the time to hire a worker is long a larger share of businesses would like to increase their workforce, indicating that they are constrained by the labor market conditions. This is particularly evident in the urban areas and very pronounced for large firms!

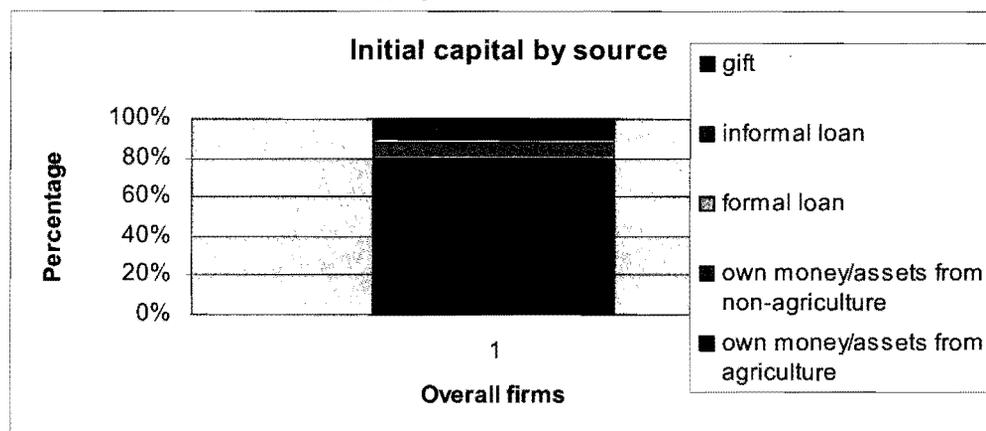
The time to fire a worker has almost halved between 2002 and 2005. No clear pattern emerges with respect to the time it takes to fire a worker and changes seem huge within three years. Note, however, that the share of firms that state to have ever fired an unskilled employee is extremely low. It ranges from 2 % in Sumbawa to 0.1 % in Malang. Only very few firms actually have experience in firing employees and hence the information received may not be very reliable.

Almost a third of all large firms seem to be constrained by the availability of labor and 16 to 17 % of small and medium firms (5 to 99 employees) would like to hire more people. That points towards a severe restriction of business activity and growth for firms beyond the micro size!

2.2 Credit ⁷

Over all firms, the *initial* capital consists to 55% of own assets originating from non-agricultural production. 24% stem from own assets of agricultural production, around 8% are formal loans, another 8% are informal loans and around 5% are gifts.

Figure 1: Initial capital by source, aggregate for all firms



2.2.1 Credit applications and approvals

Only slightly more than twenty percent of all firms had *currently* some form of loan or credit to finance their operations. The source of the loans is given by the following table 14

Table 14: Source of existing loans (unweighted)

Source of Loan/ credit	Number of firms	Share (in %)
Bank	268	10.7
Suppliers	131	5.2
Friends or Family	104	4.1
Other	103	4.1
Any form of loan/credit	549	21.9

Note that the number of firms that had received loans or credit from more than one type of source is very small; most firms take out loans from one type of source only.

In the last 12 months 309 non-agricultural firms (12.3 % of all firms) have applied for loans, most of them for one loan only (96.5% of those applying). Out of the 309 applications for the first loan 277 have been approved, 21 rejected and 11 were still pending. That amounts to an approval rate of 93 %. Three quarters of all borrowers needed collateral, which consisted mainly of land (37%), houses (15%) and buildings (12%).

Urban firms are more likely to apply for a loan and they are more likely to have it approved.

	Region		
	Urban	Rural	Total
Enterprises having applied for a loan	15,47%	10,26%	12,75%
Loans approved	96,12%	83,87%	90,97%
Loans approved in less than 1 week	64,71%	64,23%	64,52%

⁷ Aspects covered Questionnaire ModB Block III, 8, Block VB.1 g, Block VII, Block XIII (F) & Block XIII A

There is no clear size effect: small, but not micro firms, are most likely to apply for loans and they are more likely to receive them as well.

	Enterprise groups by employment				Total
	1-4	5-19	20-99	>=100	
Enterprises having applied for a loan	11.59%	19.96%	15.53%	6.37%	12.58%
Loans approved	89.46%	96.31%	85.17%	100.00%	90.67%
Loans approved in less than 1 week	65.50%	68.82%	77.57%	0.00%	66.25%

Again there is a wide variation across districts. Application rates are very high in Badung and very low in Labuan. Approval rates tend to be lower in districts with low application rates, esp. in Labuan and also in Barru. In these districts it takes also much longer to process an application, which points towards a lower effectiveness of the crediting processes.

	Kabupaten						Total
	Badung	Kutai	Sumbawa	Labuan	Malang	Barru	
Enterprises having applied for a loan	19.16%	10.94%	9.74%	5.76%	10.88%	13.86%	12.75%
Loans approved	95.55%	89.13%	94.05%	78.62%	99.35%	78.37%	90.97%
Loans approved in less than 1 week	69.00%	51.96%	79.44%	35.72%	81.58%	45.27%	64.52%

Overall 57 % of credit applications are decided within a week, another 30 percent within one month indicating a relatively speedy decision-making process. Rejections take a little more time than approvals.

Listed firms are less likely to apply for loans (9.6% compared to an average of 12.75%), but have comparable approval rates. There are much fewer loan applications in the production sector and the approval rate in the service sector is significantly below average⁸

	Sector of firm			Total
	Production	Trade	Services	
Enterprises having applied for a loan	8.30%	14.01%	12.36%	12.75%
Loans approved	96.50%	96.59%	80.61%	90.97%

2.2.2 Credit constraints

Section 2.2.1 lists only those firms that decided to apply for credit. The approval rates are high pointing to little restrictions overall with the exception in the districts of Labuan and Barru and for the service sector. Yet this only applies to those firms that have decided to apply for credit (that is 13 % of the sample). There may be many more firms that do not apply for credit in anticipation of the denial of their application.

A large number of firms stated that they needed additional funding (cf. Table 19). More than half of the firms need funds which they would mainly use to increase capital (42 %), buying material or stock up inventories (38%), purchasing equipment (8%) or buildings (5%). Rural firms are significantly more disadvantaged than urban ones and there is a distinct variation across districts with Sumbawa, Labuan and Barru having more firms in need of additional funding. There is also a strong size effect with small and especially micro firms being more likely to need more funds. This result mirrors the results from the formal loan data – firms having better access to credit were less likely to state that they are credit constrained.

⁸ Question 7 in Block VIII (average annual interest rate of individual creditor) is wrongly coded as it is not clear whether zeros denote zero percent interest rate or no credit given. Thus, we do not know the interest rate that prevails if firms borrow from individual creditors.

Table 19: Firms that need additional funding

Kabupaten	
Badung	32.11%
Kutai K.	56.52%
Sumbawa	73.74%
Labuan B.	70.12%
Malang	44.43%
Barru	70.26%
Region	
Urban	45.00%
Rural	62.80%
Size of firm (by employment)	
1-4	56.22%
5-19	40.24%
20-99	32.86%
>=100	6.37%
Type of firm	
Standalone	39.12%
Household ent.	58.44%
Listed ent.	52.98%
Sector	
Production	58.36%
Trade	58.93%
Services	46.16%
Total	54.25%

In order to assess the relative capital needed we calculated the amount that firms stated to need relative to their current capital (own funds – receivables, cash, savings – and loans and credits). Our calculations include also those firms that did not require additional capital. This is given in Table 20.

Table 20: Capital requirements relative to current capital

In %	Amount of money needed to borrow as a percentage of total capital (mean)
Kabupaten	
Badung	113.59
Kutai K.	55.96
Sumbawa	39.74
Labuan B	998.50
Malang	108.33
Barru	267.69
Region	
Urban	110.07
Rural	405.47
Size of firm (by employment)	
1-4	277.81
5-19	102.74
20-99	10.36
>=100	4.81

Type of firm	
Standalone	156.77
Household	278.91
Listed	189.69
Sector	
Production	25.05
Trade	397.44
Services	94.19
Total	253.58

Table 20 shows that many firms are highly undercapitalized, if we regard the stated need for additional funds as a good indication for actual capital needs. Especially the small firms and thus the household firms are extremely undercapitalized and that refers predominantly to firms in the trade sector. Firms in Labuan are hugely in need of additional funds. On average (including those firms that do not need additional funds) firms need 2.5 times their current funds! That is a huge quantity and underscores the importance of credit restrictions as a major development obstacle.

Only a quarter of all firms would apply for a loan from formal institutions,⁹ all others would not resort to the formal credit sector. The pattern is typical: large and urban firms are more likely to apply for a formal loan, household firms and firms in the production sector are less likely to do so.

Table 21: Share of firms that would apply to the formal credit sector for their additional funds

	Applying from a formal financial institution
Kabupaten	
Badung	49.46%
Kutai K.	20.66%
Sumbawa	26.29%
Labuan B	14.65%
Malang	21.97%
Barru	23.85%
Region	
Urban	35.24%
Rural	19.92%
Size of firm (by employment)	
1-4	25.05%
5-19	35.02%
20-99	45.11%
>=100	100.00%
Type of firm	
Standalone	42.28%
Household	22.98%
Listed	29.42%
Sector	
Production	11.29%
Trade	28.98%
Services	26.31%
Total	25.93%

This underscores credit constraints as major obstacle to growth and development. The reasons for these credit

⁹ Surprisingly, the survey provides no answer why firms did not apply for a loan if they needed it and said that they would apply.

constraints are predominantly complicated procedures! Almost half of all firms stating that they would not apply for a loan at formal credit institutions regard administrative procedures as effective obstacle for credit applications. Interestingly, there is no clear size effect: medium sized firms are equally affected by complicated procedures as micro-firms. Listed firms state complicated procedures even more often as obstacle than household enterprises and stand alone firms. There is also no difference between urban and rural areas.

Insufficient collateral is the second most important obstacle to credit applications with 17 percent of the firms stating it as a reason for not applying. It affects mainly micro and small enterprises, but not medium sized firms (20 or more employees) and hardly listed firms. Firms in the production sector are particularly affected (24 %).

High interest rates are the third major obstacle with 14% of firms stating it as effective deterrent for formal credit applications. They affect urban firms to a lesser extent than rural firms. In a related vein, the inability to repay the loan is an important reason not to apply for a loan for small and micro firms and for household and stand alone firms.

Lacking knowledge how and where to apply or inaccessibility of credit institutions do not play a role in hindering firms to apply.

Table 22: Obstacles for borrowing from formal institutions

Reasons for not borrowing from a formal financial institution	Region		Ent. groups by employment			Type of firm			Total
	Urban	Rural	1-4	5-19	20-99	Standalone	Household Ent.	Listed	
No debt	2.1%	3.5%	2.6%	9.4%	0.0%	8.3%	2.4%	2.0%	3.0%
Save own money	3.1%	3.3%	2.7%	6.6%	0.0%	3.4%	3.3%	1.1%	3.3%
Borrow from family/friends	0.6%	0.1%	0.3%	0.0%	0.0%	0.2%	0.3%	0.0%	0.3%
Possible inability to pay the debt	6.5%	7.6%	7.0%	9.0%	0.1%	8.3%	7.1%	0.7%	7.2%
Don't know where to apply	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%
Don't know how to apply	0.8%	1.4%	1.3%	0.0%	0.0%	0.3%	1.3%	0.0%	1.2%
No financial institution nearby	0.5%	0.1%	0.2%	0.0%	0.0%	0.0%	0.2%	2.6%	0.2%
High interest rates	10.6%	15.4%	13.7%	18.8%	16.8%	18.2%	13.2%	18.5%	13.7%
Insufficient collateral	16.2%	16.8%	16.9%	10.3%	0.0%	15.7%	16.7%	5.0%	16.6%
Problems with previous loans	0.6%	1.4%	1.0%	2.8%	10.4%	1.5%	1.1%	4.3%	1.2%
Complicated procedures	47.6%	47.7%	48.8%	34.4%	57.3%	36.6%	49.1%	61.9%	47.7%
Other	10.9%	2.8%	5.4%	8.8%	15.4%	7.7%	5.3%	3.9%	5.6%

2.3. Infrastructure¹⁰

Infrastructure has been measured by access, cost and quality to electricity, telecommunication (cell phones and landline), water, roads, and postal services. We provide selected results (for further results see Section 3).

Electricity

In our sample 1601 firms use electricity (i.e. 64%).¹¹ 97% of these 1601 firms use PLN as their provider. Firms without electricity are concentrated predominately in Malang, but also in Barru and Labuan as shown in Table 23: In Malang around 60 % do not have electricity, in Badung it is only around 15%. Urban firms are significantly more likely to have electricity than rural firms.

Table 23: Percentage of firms without electricity (unweighted and weighted)

	District						Region	
	Badung	Kutai	Sumbawa	Labuan	Malang	Barru	Urban	Rural
No. of firms	63	91	135	193	256	175	404	509

¹⁰ Aspects covered: Questionnaire ModB: Block Xi, Block XIII (A, B, C, D, E) and Block XIII.A

¹¹ In the unweighted sample 36% do not have electricity, in the weighted sample it is a total of 38 percent.

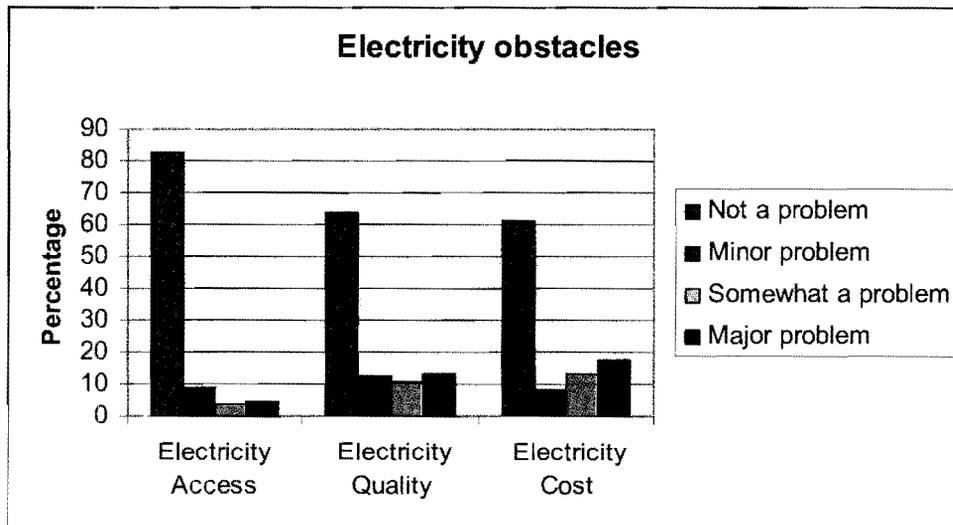
Percentage	15.0	22.0	32.1	46.3	60.5	41.6	31.2	41.8
Percentage weighted	17.8	23.1	36.0	55.7	73.6	39.6	27.5	47.6

As expected there is a strong size effect: 41 percent of the micro-enterprises (1-4 employees) have no electricity and 21 percent of the small enterprises (5-19 employees); almost all larger firms have electricity. 22 % of standalone firms and 42 % of household enterprises have no electricity whereas only 7 % of listed firms are lacking electricity. Half of all production firms, 40 % of service firms and a third of all trade firms have no electricity.

The reliability of electricity supply varies for those firms that do have electricity. Only 17 percent experienced no blackouts, around half of the firms experienced no more than 2 days with blackouts per month, three quarters no more than 6 days with blackouts. There is a strong regional variation hidden behind these figures: In Labuan 37 percent of the firms experienced blackouts on ten days or more per month, in Sumbawa more than a fifth of all firms that do have electricity experiences blackouts every day. With respect to the change in losses due to blackouts there, the share of firms for which losses have increased almost equals the share of firms for which losses have diminished (18.5 % and 15.1 % respectively).

More than 80% of firms state that electricity access is not a problem, followed by 9 % of firms that consider it a minor problem. The quality of electricity and cost of electricity is not a problem for 64 % and 62% of firms, respectively. In contrast 13 % and 17% of firms respectively consider quality and cost of electricity a major problem (unweighted case).¹² Firms that do not have an access to electricity yet, do not consider their missing access as a problem in 91% of all cases.

Figure 2. Infrastructure obstacles due to electricity



Source: Calculated based on ModB-12w.

Telecommunication

Only 18 percent of all firms are using a landline telephone and only 20 percent are using a cell phone to do business. Out of those 20 percent 57 percent do not have a landline; in other words 29 % of all firms use a phone for doing business, either a landline or a cell phone or both.

¹² Percentages refer to all firms excluding missing values.

Table 24: The usage of telephones for doing business 2005 (weighted sample)

Using a cellular phone (in %)	Using a landline telephone (in %)		
	Yes	No	Total
Using a cellular phone (in %)			
Yes	43.5	56.5	100
	47.7	13.5	19.7
No	11.7	88.4	100
	52.3	86.5	80.3
Total	17.9	82.1	100
	100	100	100

Key: row proportions
column proportions

Again there is a strong geographical divide in landline connection and a strong divergence between rural and urban areas, as shown in Table 25.

Table 25: Businesses that have a landline (unweighted)

	District						Total	Region	
	Badung	Kutai	Sumbawa	Labuan Batu	Malang	Barru		Urban	Rural
Frequency	96	35	39	18	47	44	279	371	126
Percentage	48.5	19.1	18.2	17.3	34.6	23.2	27.2	28.8	10.5

The eighty percent that do not have a landline have little chance to receive one: Only 5.4 percent of all firms stated that it is possible to get a new landline connection, only 3.7 percent of firms that did not have a landline said it would be possible to get one!

Interestingly, only 10 percent of all firms considered access to landline a problem or even a major problem (5 % each). Access to cellular phones was regarded a problem or a major problem by 8 percent only (weighted sample).

2.4. Marketing and Competition¹³

There is a total of 283 firms in the production sector, 1355 firms are in the trade sector and 883 firms in services. Most production firms operate predominantly locally: On average half the firms made the majority of their sales to consumers in their village, 88 percent sold mostly to consumers within their own district. Rural firms are more focused on their own village. There are differences between districts with firms in Malang and Labuan being less concentrated on their own village with Malang firms serving more the district and the province and Labuan being focused on the sub district (kecamatan). The figures for the inputs purchased show a similar picture.

Table 26: Geographical distribution of main Sales and Purchases (weighted sample)

Location of sales made to, 2005, processing firm	Kabupaten						Region		
	Badung	Kutai	Sumbawa	Labuan	Malang	Barru	Urban	Rural	Total
Same Village	81,1%	41,5%	72,8%	28,0%	19,5%	78,2%	44,2%	50,9%	49,1%
Same sub-district	6,4%	34,1%	19,3%	65,8%	5,0%	7,4%	13,2%	13,3%	13,3%
Same district	9,2%	19,3%	6,3%	5,5%	47,3%	12,4%	22,6%	25,7%	24,9%
Same province	0,9%	5,1%	1,7%	0,8%	22,7%	1,5%	18,6%	6,7%	10,0%
Different province	1,2%	0,0%	0,0%	0,0%	5,6%	0,6%	0,3%	3,4%	2,5%
Different country	1,2%	0,1%	0,0%	0,0%	0,0%	0,0%	1,0%	0,0%	0,3%

¹³ Note that for trade and service enterprises: subchapters have been rearranged in the Final do files according to the order of questions covered for processing firms. Topics covered: Questionnaire ModB Block IV, Block XIII (G), Block XIII.A.

Location where inputs used are made, processing firm, 2005									
Same Village	55,4%	60,1%	62,8%	24,4%	76,6%	81,1%	52,8%	71,4%	66,2%
Same sub-district	0,1%	22,3%	28,6%	37,3%	2,6%	9,0%	3,1%	12,9%	10,1%
Same district	16,4%	1,5%	6,1%	17,3%	12,0%	2,8%	19,8%	6,5%	10,2%
Same province	17,1%	14,6%	1,7%	21,0%	6,9%	4,1%	15,2%	7,7%	9,8%
Different province	11,0%	1,5%	0,8%	0,0%	0,1%	3,1%	9,2%	0,6%	3,0%
Different country	0,1%	0,0%	0,0%	0,0%	1,8%	0,0%	0,0%	0,9%	0,7%

As expected, larger firms sell a larger share to more distant customers. The same holds true for listed firms compared to household and standalone enterprises.

Location of sales made to, 2005, processing firm	Ent.groups by employment				Type of firm			Total
	1-4	5-19	20-99	>=100	Standalone	Household	Listed Ent.	
Same Village	50,46%	46,52%	1,66%	9,11%	51,71%	48,65%	18,87%	49,07%
Same sub-district	13,94%	10,64%	14,53%	0,00%	13,74%	13,19%	8,51%	13,27%
Same district	22,90%	34,37%	22,87%	0,00%	28,78%	23,98%	38,26%	24,88%
Same province	10,74%	7,22%	6,21%	25,16%	2,23%	11,60%	21,02%	9,98%
Different province	1,87%	0,76%	54,73%	4,41%	2,22%	2,58%	1,00%	2,51%
Different country	0,10%	0,49%	0,00%	61,33%	1,31%	0,00%	12,35%	0,28%
Location where inputs used are made, processing firm, 2005								
Same Village	74,86%	31,63%	0,33%	34,26%	43,13%	70,58%	16,99%	66,16%
Same sub-district	9,42%	12,00%	24,51%	0,00%	4,24%	11,21%	6,15%	10,12%
Same district	6,94%	23,90%	30,54%	0,00%	32,29%	6,20%	17,87%	10,24%
Same province	8,11%	18,28%	6,12%	4,41%	19,77%	7,85%	36,60%	9,80%
Different province	0,66%	14,20%	0,82%	43,24%	0,56%	3,35%	19,62%	3,00%
Different country	0,00%	0,00%	37,68%	18,09%	0,00%	0,80%	2,77%	0,69%

Compared to 2002, more sales are made to farer regions. For instance, the percentage of firms making the majority of their sales to the same village has decreased while the corresponding share to foreign countries has increased.

The percentage of sales based on written or verbal contracts has increased consistently in all sectors from 2002 to 2005. In 2005, percentages are especially high for the production sector at the Kabupaten level (cf. Table 27). The service sector is ranked second. In micro enterprises of the production sector, 21% of sales are based on contracts, followed by the service sector, where 18% can be found. For small and medium sized firms the service sector is strongest represented concerning contracts made. For large enterprises in all but the trading sector, 100% of all sales are based on contracts. In the trade sector, only 75% of sales are based on contracts.

On average, the percentage of sales that is based on written or verbal contracts is very low – it is 27 percent in the production sector, 22 percent in the service sector and only 11 percent in trade. The percentage increases with firm size and it is higher for listed firms in production and trade, but not in services.

Table 27: Percentage of sales based on written or verbal contracts, 2005

Sector	Production	Trade	Service
Kabupaten			
Badung	52.31	19.34	46.69

Kutai K.	47.50	14.40	23.04
Sumbawa	28.75	7.60	29.00
Labuan B.	19.10	11.38	15.57
Malang	10.25	3.59	6.50
Barru	26.70	5.48	16.11
Region			
Urban	31.07	9.65	19.05
Rural	23.40	11.87	24.91
Size of firm			
1-4	20.73	9.07	18.27
5-19	33.62	23.10	44.28
20-99	42.38	50.38	55.42
>=100	100.00	75.00	100.00
Type of firm			
Standalone	21.10	12.78	25.60
HHEnterprise	19.69	9.36	20.73
Listed	57.10	24.21	21.36
Sector Total	26.68	10.72	21.74

Source: Calculated based on ModB-12w.

More than half of the firms face many competitors and have many buyers already at the village level. The competition on the input side however is less intense. It is remarkable that about half of the firms do not know how many suppliers of the inputs they need are in the village. That seems to point towards stable supply relationships and little competition on the input side. There are strong differences between Kabupaten with Sumbawa having little competition on the output and input side and Badung and Barru having much of both.

Table 28: Competition on the village and district level, processing firm

	Kabupaten						Total
	Badung	Kutai K.	Sumbawa	Labuan B.	Malang	Barru	
Competitors, same village, processing firm							
More than 20	62,9%	0,0%	5,7%	22,4%	30,6%	70,0%	35,5%
11 to 20	1,9%	33,2%	7,8%	10,9%	17,5%	3,6%	12,4%
6 to 10	4,0%	12,2%	32,9%	0,3%	5,8%	5,7%	9,2%
1 to 5	21,9%	52,2%	38,6%	66,3%	21,3%	20,2%	28,9%
Don't know	9,4%	2,4%	15,1%	0,3%	24,9%	0,5%	14,0%
Suppliers, same village, processing firm							
More than 20	9,1%	15,5%	0,0%	7,0%	1,7%	4,7%	4,9%
11 to 20	17,9%	16,9%	1,7%	4,0%	2,1%	1,4%	7,1%
6 to 10	15,3%	21,6%	4,8%	0,9%	5,0%	5,9%	8,7%
1 to 5	47,5%	30,2%	14,3%	61,9%	23,9%	17,1%	30,0%
Don't know	10,2%	15,7%	79,3%	26,2%	67,4%	71,0%	49,3%
Buyers, same village, processing firm							
More than 20	26,9%	55,8%	33,5%	34,9%	32,3%	10,2%	31,5%
11 to 20	0,4%	21,1%	5,2%	38,0%	18,2%	4,5%	12,3%
6 to 10	1,1%	6,1%	15,5%	12,3%	4,9%	36,1%	9,1%
1 to 5	68,9%	16,7%	8,1%	7,0%	15,4%	44,7%	29,6%

Don't know	2,7%	0,3%	37,7%	7,9%	29,3%	4,5%	17,6%
	Badung	Kutai K.	Sumbawa	Labuan B.	Malang	Barru	Total
Competitors, same district, processing firm							
More than 20	70,7%	17,3%	0,1%	14,3%	29,3%	6,2%	31,1%
11 to 20	0,7%	22,7%	0,0%	0,0%	2,2%	6,2%	4,0%
6 to 10	7,9%	7,9%	0,0%	20,1%	3,4%	1,9%	5,0%
1 to 5	0,0%	0,3%	0,0%	0,9%	0,7%	5,1%	0,8%
Don't know	20,7%	51,8%	99,9%	64,7%	64,4%	80,6%	59,0%
Suppliers, same district, processing firm							
More than 20	15,1%	36,7%	0,0%	11,1%	19,0%	2,6%	15,1%
11 to 20	2,2%	15,0%	0,0%	1,0%	0,0%	4,6%	2,2%
6 to 10	14,7%	0,0%	0,0%	0,9%	1,7%	0,2%	4,4%
1 to 5	50,5%	7,2%	0,1%	12,0%	5,1%	4,8%	16,2%
Don't know	17,6%	41,2%	99,9%	75,1%	74,3%	87,9%	62,1%
Buyers, same district, processing firm							
More than 20	17,1%	48,6%	2,9%	3,0%	56,5%	11,7%	33,0%
11 to 20	1,3%	0,0%	0,0%	0,0%	1,9%	1,9%	1,2%
6 to 10	9,5%	2,5%	0,0%	10,1%	2,8%	0,0%	4,1%
1 to 5	53,0%	9,8%	1,1%	11,6%	0,1%	1,9%	14,7%
Don't know	19,0%	39,1%	95,9%	75,4%	38,8%	84,6%	47,1%

The larger the area that is considered (village, sub district, district, province), the higher is the ignorance about the market situation. Almost 60 percent of the firms do not know how many competitors they face at the district level compared to 14 % at the village level, which suggests that these firms operate only locally. Likewise, ignorance levels for suppliers and customers go up with increasing geographical coverage. Ignorance levels go down with firm size; in addition to that, there is no clear size pattern with respect to competition intensity.

Out of 280 processing firms, 90% stated that they did not have any problems with competitors, suppliers or buyers. However, for the remaining 10% of firms where problems occurred, the solution was solved for 37% of all cases directly with those involved. In 30% of all cases, the arising conflict was solved informally by involving a respected individual. One of the least favored methods is to involve the Business Competition Supervisory Commission, which accounts for only 4% of cases where problems prevail.

In the trading sector out of 1344 firms only 4% were found to have a problem with other market agents. The preferred method of handling these problems was directly with those involved for 76% of all cases, followed by "other" in 17%. The way through the Business Competition Supervisory Commission is a method used only in 2% of the cases when problems arise. For the service sector out of 876 firms observed, 4% stated that they had a problem with competitors or buyers. Again, the most preferred method of solving these problems is for 64% of all cases directly, for 19% other methods are stated and in 13% informal ways of finding a solution are applied. It is remarkable that none of the processing, trading or service enterprises solved their problems with competitors, suppliers or buyers through the courts!

2.5. The Diffusion of Technical Knowledge¹⁴

There are a total of 304 firms for which innovations are recorded. After 2001 there has been a steady increase in the number of implementations launched.¹⁵ Three quarters of all firms state as source for the idea the category "other".

14 Topics covered: Questionnaire ModB Block XI, Block XIII (J), Block XIII A. All the results in section refer to the unweighted sample.

15 The years in which innovations were implemented ranges from 1982 onwards, with a total of 283 firms stating the date of the innovation. However, only from 1992 onwards observations are given for every single year thereafter.

Five percent of the ideas are from the parent firm and 7 % from client/supplier and machine supply each.

For 51% of all cases the innovation was paid by the Enterprises' funds. 40% were paid by "other", where "sendiri" is the most stated category. Only 7% of innovations are funded by bank loans and 2% are enabled by government programs. None of the innovations observed is funded by a NGO program or by a foreign donor.

Asked for the source of technical support to implement the innovation, 79% of all cases named the category "other", where "sendiri" takes account for 23%. 14% of support was provided by the private sector. The regional government only is involved in 3% of the implementations. The private sector especially finances registered firms, as there are 31% of registered firms supported by the former.¹⁶

The main technology obstacle was for 57% of all technology obstacles the lack of training. For the second most important obstacle lack of training even accounts for 75%. In Kutai Kertanegara there are no other technology obstacles but lack of training. Whereas lack of training and cost of accessing information and technology are most influential in urban areas, in rural areas the access to computers and to information and technology is particularly problematic.

2.6. Local Governance¹⁷

Taxes

Businesses have to pay taxes and levies at each level (center, province, district, and village) which consists of official taxes and fees and unofficial levies. They comprise

1. *central*: income tax, land and building tax, value added tax, customs, other central taxes and unofficial levies
2. *provincial*: Motor vehicle tax, Tax on changing vehicle ownership, other taxes, unofficial levies
3. *district*: Hotel tax, restaurant tax, entertainment tax, advertising tax, class C mining tax, other district taxes and levies, unofficial levies
4. *other*: payments to security officials, to thugs, to sub-region and village officials, others.

Note that a large share of firms does not pay taxes at all in some subcategories. For instance 78 % of all firms do not pay central taxes at all. The corresponding figures for all categories are given below.

Share of firms that do not pay taxes and levies in the respective category (weighted sample)

Tax category	
Central	78%
Provincial	72 %
District	84 %
Other	68 %
Any Tax or Levy	41 %

The composition of all taxes and levies are given in Table 29:

Table 29: Structure of taxes and levies by level (weighted sample)

In %	sub total taxes, 2005*			
	Central gov. taxes	province gov. taxes	region gov. taxes	other levies
Kabupaten				
Badung	37.39	18.25	21.96	22.40
Kutai K.	47.57	15.56	20.45	16.42
Sumbawa	51.35	10.50	21.18	16.97

¹⁶ Concerning the change of technology obstacles since 2002 all six aspects of possible hindrances are found to be of somewhat a problem for around 90%. Those six areas are lack of training, high research costs, limited access to computers, limited access to information and technology and high cost of accessing information and technology.

¹⁷ Topics covered: Questionnaire ModB Block V.D., Block VII., Block XIII (H, K, L), Block XIII.A.

Labuan B.	34.13	31.19	15.15	19.52
Malang	31.77	26.01	24.44	17.77
Barru	44.30	15.98	21.13	18.58
Region				
Urban	39.38	18.60	21.86	20.16
Rural	41.89	19.95	20.21	17.94
Size of firm				
1-4	40.97	19.39	20.92	18.73
5-19	38.19	19.22	21.40	21.19
20-99	37.41	20.20	21.45	20.94
>=100	62.37	10.89	14.85	11.89
Type of firm				
Standalone	37.33	19.70	21.59	21.39
Household	41.56	19.22	20.86	18.37
Listed	63.96	10.44	14.30	11.29
Sector				
Production	40.57	19.04	22.27	18.12
Trade	40.53	19.36	20.71	19.40
Services	40.97	19.30	21.00	18.73
Total	40.69	19.30	21.00	19.01

*Base size are 2516 firms

Central government taxes account for 41% of total taxes. Region government taxes are slightly higher (21%) than province government taxes and other levies (19% each). While there is no clear pattern of the tax structure with respect to firm size, region or sector listed and large firms pay a much larger share in central government taxes. There is also considerable variation across districts: Malang and Labuan have a much lower share of central taxes.

In 2005, central government taxes consist for 37% of income tax, for 12% of land and buildings tax, for 47% of value added tax, for around 4% of customs and for only very slight shares of other taxes and unofficial levies by the central government. Provincial taxes consist largely of revenues from the motorized vehicle tax (98%) and tax on changing vehicle ownership (1.5%).

On the regional level, 37% account for other regional government taxes, followed by hotel taxes, which make up 24% of all regional taxation. Unofficial levies of regional government taxes consist of 20%, followed by Class C mining taxes with 13%. The other shares are of restaurant taxes (5%), advertising taxes (1%) and a very small amount of entertainment taxes.

Table 30: Distribution of other levies (weighted sample):

	Other levies 2005			
	levies to security officials	levies to thugs	levies to subregion or/ and village officials	other
Kabupaten				
Badung	8.35	2.54	52.30	36.82
Kutai K.	5.86	7.08	71.98	15.07
Sumbawa	5.98	2.67	75.74	15.62
Labuan B.	39.10	7.85	17.45	35.60
Malang	24.06	7.53	17.67	50.73
Barru	6.14	13.86	63.53	16.47
Region				

Urban	10.10	5.12	51.86	32.92
Rural	16.81	7.96	49.42	25.81
Size of firm				
1-4	14.17	6.76	50.57	28.50
5-19	9.98	5.36	49.10	35.56
20-99	10.77	4.87	47.97	36.38
>=100	7.55	12.98	62.75	16.72
Type of firm				
Standalone	10.84	4.10	48.79	36.27
Household	14.37	7.27	51.05	27.31
Listed	8.05	12.76	62.77	16.42
Sector				
Production	14.75	6.39	46.76	32.11
Trade	13.45	6.44	51.57	28.54
Services	13.44	6.90	50.41	29.25
Total	13.60	6.60	50.59	29.21

*Over all firms

There is a strong regional variation in the "other levies": In Malang and Labuan payments to security official play a large role while payments to village and subregional officials are very important in Kutai, Sumbawa and Barru. Listed firms pay relatively less to security officials and more to thugs; rural firms pay more to security officials. Sectors are very similar.

Permits

In 72% of all cases none of the following permits exist: building permit, industrial permit/registration, enterprise registration, trade permit, application for a commercial electricity connection, work safety permit/certificate from Committee for Health and Work Safety, others. 14% of firms have one permit only, 7% of firms have two permits, 3% have three permits, 2% have four permits, and 1% has five permits.

Table 31: Share of firms that have permits

Having a permit	Ent.groups by employment				Type of Firm			Region		Total
	1-4	5-19	20-99	>=100	Standalone	Household Ent	Listed Ent.	Urban	Rural	
Permit. all different fields	18.4%	53.9%	97.6%	100.0%	49.4%	16.1%	96.1%	36.2%	12.0%	23.5%
Building Permit	7.1%	21.7%	91.4%	100.0%	17.6%	7.3%	42.6%	15.3%	4.5%	9.6%
Industrial permit/Registration	1.9%	13.0%	78.3%	100.0%	8.7%	2.3%	21.7%	5.1%	2.4%	3.7%
Enterprise registration	4.9%	21.4%	86.2%	77.4%	22.6%	2.9%	75.6%	12.0%	3.0%	7.3%
Trade permit (SIUP)	10.8%	41.4%	94.2%	87.4%	34.9%	9.3%	83.0%	25.0%	5.9%	15.0%
Application for a commercial electricity connection	1.8%	7.2%	20.6%	56.7%	6.2%	1.5%	12.7%	3.0%	2.1%	2.5%
Work safety permit/certificate from Committee for Health and Work Safety (P2K3)	1.6%	1.7%	26.0%	88.7%	0.9%	1.9%	9.0%	1.6%	1.9%	1.7%

As expected we have a clear size effect in the existence of permits. Also, household enterprises are much less likely to

have permits than standalone firms which are in turn much less likely to have permits compared to listed enterprises. Urban firms are more likely to have permits than rural ones.

There is confusion about the reason why firms do not have permits. Half of the firms state that permits are simply not requested from them.

Table 32: Building permits (unweighted sample)

		Building permit necessary?			Total
		Yes	No	Don'tknow	
Have building permit	Yes	293	11	7	311
	No	522	821	594	1,937
Total		815	832	601	2,248

The building permit may serve as an example. Those who have a permit overwhelmingly think that it is necessary for them. Among those who do not have it a large share (27%) thinks it is necessary. Of those who think it is necessary for them only 36 percent actually have it. Yet, when asked why they do not have it, those who think it is necessary for them 55% said it was not requested.

Corruption

On average, two thirds did not regard corruption as a problem, yet 20 percent regarded it a major problem; a quarter of all firms a problem. There are significant differences between districts with Kutai and Malang being less affected by corruption than the other districts. Household enterprises are somewhat less affected by corruption than listed and standalone firms. There is no clear size pattern.

Table 33: Is corruption a problem?

Corruption 2005	Kabupaten							Region		Total
	Badung	Kutai K.	Sumbawa	Labuan B.	Malang	Barru	Total	Urban	Rural	
Not a problem	59,0%	78,0%	69,5%	50,7%	80,5%	64,6%	66,8%	69,0%	64,8%	66,8%
A minor problem	8,7%	6,2%	3,5%	9,0%	2,4%	7,7%	6,5%	7,0%	6,1%	6,5%
Somewhat of a problem	6,0%	6,9%	4,3%	10,6%	5,1%	7,4%	6,6%	2,8%	9,9%	6,6%
A major problem	26,3%	8,8%	22,7%	29,7%	12,0%	20,3%	20,2%	21,2%	19,2%	20,2%

Corruption 2005	Ent.groups by employment				Type of firm			Sector of firm		
	1-4	5-19	20-99	>=100	Standalone	Household Ent.	Listed	Production	Trade	Services
Not a problem	67,8%	59,8%	71,5%	46,3%	69,1%	66,2%	44,1%	69,1%	70,0%	61,3%
A minor problem	6,2%	8,9%	3,3%	0,0%	8,7%	5,9%	25,2%	2,8%	7,3%	6,5%
Somewhat of a problem	7,1%	2,2%	7,3%	0,0%	3,8%	7,4%	6,7%	5,4%	5,3%	8,8%
A major problem	18,9%	29,1%	17,9%	53,7%	18,5%	20,6%	24,0%	22,7%	17,3%	23,4%

The issue of time and cost of registering an Enterprise is especially of relevance for medium sized firms, where 38% state that it is a minor problem, a moderate problem or a major problem.

3. Major Obstacles to Growth and Development of Firms

In addition to questions on marketing and competition, infrastructure, credit, labor, technology and governance, firms were asked to classify a given list of potential problems as major, moderate, minor, or no problem. Full results are given in Table 34 below. Below we highlight **the major obstacles** and point out if they apply to a specific subset of firms in particular.

1. **Credit restrictions** are a major problem for more than a quarter of the firms. This refers to all aspects of borrowing through the formal credit system, including high interest rates, too complicated procedures and the fear not to be able to repay the loan. Micro- and small firms are particularly affected by this obstacle as are household and standalone enterprises.
2. More than a fifth of all firms bemoan the **lack of demand** for their goods and services. This applies predominantly micro- and small enterprises, and household and standalone firms, and much less to listed and to medium and large firms.
3. **Bad governance** is a problem for all types of firms. Twenty percent see corruption as a major obstacle, almost a quarter of all firms regard uncertain economic policies as a major problem. Restrictive regulations and registration procedures and high taxes are major problems for ten percent of all firms with rural and micro-firms being somewhat less affected by this, presumably because they operate below the radar screen of official regulations and many do not pay taxes at all.
4. **Road infrastructure** is a major problem for 10 to 17 % of all firms. Especially rural firms suffer from insufficient road quality and road access; high transportation costs are a major problem for all types of firm. For many medium and large firms traffic congestion is a major problem.
5. **Electricity** quality and cost (not access) is a major problem for 12 and 17 percent of all firms, respectively. Rural firms suffer more from insufficient quality. The situation is particularly bad in Sumbawa.
6. Labor market issues seem not to be major problems for most firms; the lack of skilled labor and work permits for foreigners is a problem for some small (5-19 workers) and urban firms. It is a problem especially in Labuan.

Table 34: Major problems to the enterprise's growth and operation

Major problem, 2005	Total	Kabupaten						Region		Ent.groups by employment				Type of firm			Sector of firm		
		Badung	Kutai	Sumbawa	Labuan B.	Maiang	Barru	Urban	Rural	1-4	5-19	20-99	>=100	Standalone	Household	Listed	Production	Trade	Services
Labor																			
Inflexible hiring and firing regulations	3,7%	6,0%	1,6%	0,6%	8,1%	0,0%	4,5%	4,6%	2,9%	3,0%	8,5%	15,3%	12,7%	5,4%	3,2%	4,6%	1,7%	2,5%	6,1%
High labor costs due to government regulations	4,0%	7,1%	1,5%	0,6%	7,8%	0,0%	4,9%	5,2%	2,8%	3,8%	5,1%	10,8%	30,2%	3,4%	4,1%	6,1%	1,7%	2,9%	6,3%
Obtaining work permits for foreigners	5,0%	11,4%	2,1%	0,6%	6,3%	0,0%	4,7%	7,4%	2,7%	4,5%	9,2%	3,8%	0,0%	7,0%	4,4%	4,7%	1,5%	4,1%	7,3%
Lack of skilled labor	5,7%	11,8%	1,7%	0,7%	10,1%	0,6%	5,2%	7,1%	4,4%	5,1%	10,6%	6,5%	0,0%	5,4%	5,8%	1,3%	4,1%	4,3%	8,1%
Difficulties hiring labor from outside the region	2,9%	2,9%	1,7%	0,7%	7,0%	0,0%	5,4%	3,3%	2,5%	3,1%	1,7%	4,1%	30,2%	1,4%	3,3%	5,4%	1,6%	3,0%	3,2%
Credit																			
Possibility to borrow from family/friends	8,0%	6,7%	8,4%	8,2%	9,6%	5,3%	10,6%	9,5%	6,6%	8,5%	3,8%	1,6%	12,7%	2,4%	9,5%	6,6%	4,2%	8,5%	8,4%
Borrowing from formal financial institution	25,8%	16,7%	36,2%	24,2%	35,3%	18,0%	30,8%	24,2%	27,2%	27,1%	17,0%	13,8%	12,7%	18,3%	27,9%	10,2%	16,6%	26,1%	28,2%
Obstacle due to interest rate	29,0%	22,7%	40,6%	27,5%	33,3%	21,3%	32,5%	27,0%	30,9%	29,6%	25,7%	19,7%	12,7%	23,4%	30,6%	16,2%	20,2%	28,9%	32,1%
Complicated bank loan procedures	26,1%	22,9%	38,3%	26,1%	29,4%	16,9%	24,6%	26,8%	25,4%	26,0%	28,7%	10,3%	12,7%	20,8%	27,6%	8,3%	17,7%	25,3%	30,0%
Fear of being unable to pay loan installments	28,8%	29,1%	32,6%	22,0%	46,1%	15,5%	28,7%	28,3%	29,2%	28,9%	30,6%	6,9%	12,7%	27,3%	29,2%	9,7%	18,0%	31,0%	29,0%
Infrastructure																			
Electricity Access	4,6%	2,7%	2,6%	15,2%	3,1%	7,2%	0,4%	2,0%	7,0%	5,2%	0,5%	0,3%	6,4%	1,9%	5,4%	7,9%	12,3%	3,1%	4,2%
Electricity Quality	11,8%	3,8%	24,1%	25,2%	11,0%	7,7%	6,0%	7,3%	15,9%	12,6%	5,7%	6,2%	24,0%	7,7%	12,9%	15,5%	18,9%	9,6%	12,7%
Electricity Cost	17,0%	22,0%	12,2%	20,1%	17,2%	11,5%	16,4%	15,2%	18,6%	16,0%	23,6%	18,3%	25,5%	17,9%	16,7%	18,2%	19,5%	13,6%	21,1%
Fixed line access	4,8%	7,6%	4,8%	6,0%	6,3%	0,6%	2,2%	3,6%	5,9%	4,9%	4,1%	4,2%	6,4%	2,8%	5,3%	5,3%	3,6%	4,9%	5,0%
Fixed line quality	3,6%	4,7%	5,2%	5,1%	3,9%	0,6%	1,4%	2,4%	4,7%	3,5%	4,2%	3,7%	6,4%	2,4%	3,9%	6,8%	3,8%	4,2%	2,6%
Fixed line cost	6,7%	16,0%	7,4%	4,5%	4,0%	0,0%	0,7%	9,1%	4,4%	5,4%	17,0%	8,0%	6,4%	13,0%	4,9%	8,3%	3,8%	6,4%	7,9%
Cellular access	3,0%	3,7%	1,8%	4,3%	8,8%	0,0%	0,2%	1,2%	4,6%	3,2%	1,1%	0,8%	6,4%	1,1%	3,5%	3,5%	0,5%	2,9%	3,9%
Cellular quality	2,8%	3,1%	2,6%	3,4%	7,9%	0,0%	0,6%	1,4%	4,0%	2,9%	1,7%	7,2%	6,4%	0,9%	3,3%	3,3%	1,0%	2,9%	3,2%
Cellular cost	8,6%	16,3%	10,0%	4,5%	14,0%	0,8%	0,8%	9,7%	7,5%	7,5%	17,5%	4,2%	19,0%	11,6%	7,7%	8,3%	2,4%	7,6%	12,0%
Water Access	7,6%	2,1%	11,3%	4,4%	34,3%	1,0%	0,6%	2,1%	12,6%	8,4%	1,9%	5,0%	16,2%	3,5%	8,7%	4,2%	3,9%	8,1%	8,0%
Water Quality	9,2%	2,1%	19,1%	7,4%	32,8%	1,0%	1,3%	3,6%	14,4%	10,1%	2,1%	5,0%	0,0%	4,2%	10,6%	6,1%	5,8%	9,8%	9,5%
Water Cost	7,1%	5,1%	5,9%	4,2%	30,3%	0,0%	2,2%	2,8%	11,0%	7,6%	2,7%	2,4%	0,0%	3,9%	7,9%	3,1%	3,6%	7,9%	7,0%

Major problem, 2005 (cont'd)	Total	Kabupaten						Region		Ent.groups by employment				Type of firm			Sector of firm		
		Badung	Kutai	Sumbawa	Labuan B.	Malang	Baru	Urban	Rural	1-4	5-19	20-99	>=100	Standalone	Household	Listed	Production	Trade	Services
Postal Services, Access	1,5%	2,5%	0,2%	1,0%	4,0%	1,3%	0,0%	0,3%	2,6%	1,5%	2,1%	0,0%	0,0%	1,2%	1,6%	0,3%	4,6%	1,5%	0,6%
Postal Services, Quality	1,7%	3,9%	0,5%	0,1%	3,1%	1,3%	0,0%	1,2%	2,2%	1,3%	5,4%	0,0%	0,0%	3,1%	1,3%	0,3%	4,6%	1,4%	1,3%
Postal Services, Cost	2,0%	2,9%	4,4%	0,1%	2,2%	1,3%	0,0%	1,1%	2,9%	2,1%	1,9%	0,0%	0,0%	1,3%	2,2%	0,3%	4,6%	2,0%	1,2%
Road access	9,6%	3,4%	5,4%	17,2%	22,7%	14,8%	2,6%	2,9%	15,7%	10,5%	2,4%	5,1%	35,3%	3,2%	11,3%	6,8%	19,9%	7,6%	9,1%
Road quality	14,4%	4,0%	15,4%	32,0%	26,2%	16,5%	5,1%	5,2%	22,7%	15,4%	6,8%	7,6%	19,0%	8,1%	16,1%	8,1%	21,9%	12,4%	14,8%
Transportation Cost	16,9%	18,4%	8,5%	24,2%	15,4%	22,9%	12,9%	13,1%	20,3%	16,3%	21,7%	24,8%	19,0%	14,9%	17,4%	12,6%	24,2%	15,8%	16,1%
Traffic	11,3%	22,5%	2,7%	11,4%	8,9%	13,5%	1,7%	12,9%	9,7%	10,5%	15,1%	46,4%	19,0%	19,4%	9,1%	11,4%	16,5%	8,5%	13,6%
Facilities to transport goods	9,5%	11,1%	6,3%	13,8%	7,5%	13,6%	4,8%	7,8%	11,1%	9,2%	12,0%	8,9%	19,0%	8,6%	9,8%	8,6%	18,9%	8,0%	8,7%
Marketing & Competition																			
Access to markets	8,1%	7,6%	2,0%	7,0%	18,0%	8,9%	7,3%	5,8%	10,1%	7,8%	10,4%	2,4%	22,6%	4,4%	9,1%	6,6%	8,5%	8,0%	7,9%
Difficulty in obtaining information on product's market	6,8%	4,7%	2,1%	6,0%	14,8%	8,5%	7,7%	4,9%	8,4%	7,0%	5,1%	4,6%	6,4%	2,3%	8,0%	7,7%	9,3%	5,6%	7,6%
Demand for goods & services produced	21,3%	23,6%	12,5%	7,7%	32,5%	24,5%	25,3%	21,7%	20,9%	20,9%	28,3%	5,7%	6,4%	19,5%	21,8%	14,7%	24,3%	20,8%	20,9%
Technology																			
Lack of training	4,5%	4,6%	1,5%	1,9%	11,0%	1,5%	7,1%	4,3%	4,6%	4,5%	5,0%	3,4%	6,4%	2,6%	5,0%	6,8%	5,6%	3,6%	5,4%
Research Cost	6,7%	14,2%	1,5%	1,6%	8,7%	1,3%	7,7%	8,5%	5,1%	6,3%	11,2%	4,4%	6,4%	7,7%	6,5%	6,2%	6,9%	6,6%	6,9%
Access to computers	4,7%	6,5%	2,9%	1,6%	8,4%	1,9%	6,1%	4,8%	4,7%	5,3%	1,5%	0,0%	19,0%	1,0%	5,7%	3,6%	3,9%	4,7%	5,0%
Access to information & technology	4,3%	6,2%	2,1%	1,4%	7,1%	1,9%	5,8%	4,4%	4,2%	4,7%	1,9%	1,5%	19,0%	1,4%	5,1%	3,8%	3,9%	4,3%	4,4%
Quality of information & technology	4,1%	5,7%	1,1%	1,4%	7,1%	1,9%	6,2%	4,2%	3,9%	4,4%	1,7%	3,0%	6,4%	1,4%	4,8%	3,2%	3,8%	3,9%	4,4%
Cost of accessing inform. & technology	6,3%	13,9%	1,0%	1,5%	8,0%	1,9%	6,5%	8,8%	4,1%	5,7%	12,0%	11,9%	19,0%	8,6%	5,7%	6,5%	3,7%	6,1%	7,5%
Governance																			
Corruption	19,6%	26,3%	8,7%	22,6%	29,5%	11,9%	17,8%	20,2%	19,1%	18,4%	28,8%	17,8%	52,8%	18,4%	20,0%	23,0%	22,5%	17,0%	22,5%
Uncertain economic policy	23,4%	33,2%	21,3%	26,8%	30,1%	13,7%	10,9%	23,0%	23,7%	22,9%	27,2%	24,4%	36,6%	25,8%	22,7%	18,5%	27,0%	21,1%	25,4%
Restrictive laws and regulations	14,6%	20,4%	10,2%	19,9%	18,3%	8,4%	9,0%	14,9%	14,4%	13,6%	21,0%	28,8%	36,6%	13,9%	14,8%	18,1%	19,4%	12,1%	16,8%
Time/cost to register Enterprise	9,2%	18,5%	7,8%	4,8%	8,1%	0,7%	7,9%	13,1%	5,6%	8,6%	14,4%	14,7%	0,0%	13,6%	8,0%	4,2%	1,7%	9,0%	11,9%
Time & Cost of obtaining Enterprise permits	9,4%	17,0%	11,6%	4,7%	7,9%	0,7%	7,8%	12,7%	6,3%	8,9%	14,1%	13,7%	17,6%	11,6%	8,8%	5,1%	2,3%	8,4%	13,0%
Complicated regulations to register Enterprise & obtain permits	10,1%	18,1%	13,1%	3,3%	9,3%	0,7%	9,0%	13,8%	6,7%	9,7%	14,7%	15,4%	12,7%	12,3%	9,5%	7,3%	2,5%	9,2%	13,9%
High taxes	10,6%	16,7%	3,5%	12,9%	20,3%	1,4%	7,6%	11,9%	9,4%	10,3%	13,8%	15,4%	30,2%	12,3%	10,1%	14,4%	5,7%	8,7%	14,8%
Complicated tax regulations	9,3%	16,3%	3,6%	8,2%	17,7%	0,6%	6,8%	10,1%	8,6%	8,4%	16,8%	15,2%	12,7%	9,8%	9,2%	8,0%	5,2%	7,7%	13,1%
Unofficial levies	7,2%	6,8%	6,1%	8,4%	16,4%	0,6%	7,4%	5,9%	8,4%	7,1%	7,8%	18,4%	17,6%	5,0%	7,8%	9,3%	5,5%	5,3%	10,5%

Table 35: The Most Important Obstacle to Operation and Growth

The most important obstacle	Total	Kabupaten						Region		Firm Size (by employment)				Type of Firm			Sector		
		Badung	Kutai K.	Sumbawa	Labuan B.	Malang	Barru	Urban	Rural	1-4	5-19	20-99	≥100	Standalone	Household	Listed	Production	Trade	Services
Missing values	19.2%	23.4%	34.6%	16.3%	3.7%	24.1%	5.8%	21.6%	17.0%	19.6%	15.0%	5.4%	44.1%	22.8%	18.2%	10.9%	25.3%	21.1%	14.5%
Electricity access	1.5%	3.2%	1.2%	2.1%	0.6%	0.0%	0.5%	1.1%	1.8%	1.6%	0.5%	5.1%	0.0%	1.8%	1.4%	2.5%	0.1%	1.6%	1.8%
		1.0%				0.4%						1.9%	0.0%						
			1.7%	1.0%	0.7%	1.1%			1.6%			1.2%	1.5%			2.3%	1.3%		
Fixed line access	1.6%	2.7%	0.3%	0.2%	0.9%	1.0%	3.2%	2.5%	0.8%	1.7%	0.8%	0.0%	0.0%	0.5%	1.9%	1.1%	0.9%	1.9%	1.3%
Fixed line quality	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%
Fixed line cost	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	1.7%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Cellular Cost	0.2%	0.0%	1.1%	0.1%	0.0%	0.2%	0.0%	0.4%	0.1%	0.3%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.0%	0.2%	0.4%
Water access	0.5%	0.0%	0.7%	0.0%	1.5%	0.6%	0.3%	0.0%	0.9%	0.5%	0.3%	0.0%		1.0%	0.3%	1.9%	0.9%	0.5%	0.3%
Water quality	0.7%	0.1%	2.8%	0.5%	0.1%	0.3%	0.2%	1.1%	0.2%	0.8%	0.1%	0.0%	0.0%	0.1%	0.8%	1.8%	0.2%	0.6%	0.8%
Water cost	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	2.3%	0.9%	0.2%	0.3%	1.2%	0.0%	0.0%	0.6%	0.5%	0.4%	0.0%	0.2%	1.1%
Postal Services, Access	0.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%
		0.6%	2.2%	2.8%			0.8%	1.0%			0.8%	0.0%	0.0%	0.2%	6.1%	1.1%		4.3%	1.7%
		0.1%	2.1%			2.2%	3.7%	1.4%			2.1%	0.0%	0.0%	2.2%	4.8%	0.4%	0.4%	3.2%	7.1%
		2.5%	1.7%	3.5%	0.3%			3.5%	3.3%	3.2%	5.5%	0.0%	0.0%	2.8%	3.6%	0.0%	1.4%	3.7%	3.6%
Transportation, Traffic	0.2%	0.1%	0.0%	0.8%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	0.2%	0.3%
Transportation, Facilities to transport goods	0.4%	0.0%	0.8%	0.5%	0.5%	0.0%	1.0%	0.0%	0.8%	0.4%	0.3%	0.3%	0.0%	0.0%	0.5%	1.9%	0.4%	0.5%	0.4%
Possibility to borrow from family/friends	2.5%	1.2%	2.1%	7.7%	1.5%	3.6%	0.8%	3.8%	1.3%	2.3%	4.0%	2.2%	0.0%	3.3%	2.3%	0.5%	3.2%	2.0%	3.0%
		2.5%											0.0%						
			1.3%	2.2%		4.4%						0.2%	0.0%	5.2%	5.8%	4.2%	0.8%	6.5%	6.0%
Complicated bank loan procedures	1.6%	0.1%	0.9%	2.3%	5.2%	2.2%	1.1%	1.6%	1.7%	1.9%	0.1%	0.0%	0.0%	0.7%	1.9%	0.2%	1.0%	1.6%	1.8%
Fear of not being able to pay loan installments	2.2%	0.3%	2.5%	1.5%	3.3%	1.3%	5.6%	0.9%	3.5%	2.5%	0.5%	0.0%	0.0%	1.1%	2.5%	0.4%	0.5%	2.8%	1.9%
Access to markets	3.9%		0.7%	2.3%	5.2%	4.1%	5.0%	4.1%	3.8%	3.7%	6.4%	0.1%	1.5%	5.8%	3.4%		3.2%	4.9%	2.8%
Difficulty to obtain information on your product's market	0.7%	0.5%	0.5%	0.3%	0.2%	2.0%	0.6%	0.8%	0.6%	0.6%	0.8%	0.0%	0.0%	1.0%	0.6%	0.0%	1.1%	0.4%	1.0%
				3.3%								3.0%	0.0%						

Firms were also asked for **the most important obstacle** for their businesses. Results are given in Table 35. The picture is in many cases similar to the previous picture, where respondents were asked to rate potential obstacles as major, moderate, minor or no problem. Since each firm now had to pick just one obstacle, there may be significant differences. For instance, many firms regarded complicated procedures for credit application as major problem, but only a very few firms ranked them as *the* most important obstacle to development.

Credit constraints, demand constraints, bad road and electricity infrastructure and bad governance were dominant also as the most important obstacles. Yet some patterns become more differentiated.

- **Demand constraints** are the most important obstacle for 13 percent of all firms, but these firms are hardly located in Sumbawa and they are not medium or large sized.
- **Credit constraints** are the most important obstacle for 16 percent of all firms, either as difficulty to borrow from formal credit institutions or in the form of high interest rates. The pattern is not uniform across Kabupatens and listed firm, large enterprises and urban firms state this less often as the most important obstacle.
- **Road infrastructure** (access, cost, quality) is the most important obstacle for 13 percent of all firms, but these firms are mostly located in Malang, Sumbawa, and Labuan; they are rural and they are mostly in the production sector.
- **Electricity quality and cost** is the major problem for 9 percent of the firms. Cost is the major problem mainly for urban firms and firms in Badung and Barru, quality is a problem for rural firms and those in Kutai, Sumbawa and Labuan. Medium and large firms are not among them.
- **Uncertain economic policies** are the most important problem for many medium sized and large firms. Half of all firms with 20-99 workers state that as the most important problem! Since they constitute only a small share of all firms, only 4 percent of all firms state this problem as the most pressing one.
- **High taxes** are the most important problem for almost a quarter of the listed firms.

Table 35 can also be read column-wise which allows for a targeted policy response to the most important investment climate obstacles. We give some important examples:

- ~ **Medium and large firms** suffer most from uncertain economic policies, credit constraints and high taxes,
- ~ **Micro firms** suffer most from demand constraints, credit constraints and insufficient road and electricity infrastructure,
- ~ **Production firms** suffer much more from insufficient road infrastructure and to a lesser extent from lacking demand.
- ~ **Sumbawa** needs to focus on electricity and road infrastructure whereas in **Barru** credit and demand constraints are much more important.

Appendix

i. Master Do File

do Added_ModB-12w.do: Adding variables *rural*, *entype*, *sector* and *emplgrp*, which were not included in version 1.2, anymore.

Data file used: ModB-12w
Data file generated: ModBEnt-12wnew

do Cleaning.do: Generating new variables, controlling for outliers and labelling all variables.

Data file used: ModBEnt-12wnew
Data file generated: ModBEnt12wnew_clean

do Final_Tables_unweighted.do: Running the final analysis on the unweighted data.

Data file used: ModBEnt-12wnew_clean

do Final_Tables_wt.do: Running the final analysis with weights for the whole sample, which is dominated by Malang (*wt_bus*: business sampling probability weight).

Data file used: ModBEnt-12wnew_clean

do Final_Tables_nwt.do: Running the final analysis with weights which give an equal weighting for each Kabupaten (*nwt_bus*: normalized business weight).

Data file used: ModBEnt-12wnew_clean

ii. Data Cleaning

The most important changes and corrections for outliers of the data shall be briefly outlined in this section.¹⁸

The data showed some inconsistency as there were more firms that answered to the question of the educational level compared to the question whether a firm has full-time and part-time workers respectively at all. The number of total full-time workers was corrected by the number of total full-time workers according to educational level; it was assumed that the information given on the educational level is more precise than on the question if an enterprise has full-time workers. The same corrections had to be done for the total number of part-time workers.

For variables *recruit05*, *recruit02*, *everfir05*, *everfir02*, *chnempl05*, *chnempl02* zeros were set to missing values since the answer categories of these variables (yes/no, etc.) excluded any further categories.

The variable used for the question whether a firm has ever applied for a loan or credit had to be corrected since it has to be assumed that firms, which answered in the following that their loan was approved respectively that it was in process, had applied for a loan in the first place. Out of 12 firms, which answered the question if their loan was

¹⁸ Note that all analysis was formerly done on data set *Enterprises_v11*. However, the analysis was updated for *ModB-12w*.

approved although they had not stated that they have ever applied for a loan. 9 firms have actually received a loan or their loan was in process.

In order to be able to directly compare avamloan and avaploan the same base size was created since their number of observations did not differ substantially.

For the variables “Estimated value of loan needed as a percentage of the loan” and “Average amount repaid, as a percentage of initial loan” outliers were found, which had to be set to 100. However, it should be mentioned that for the former the amount of corrections to be made was immense such that there might be a systematic data error at this point.

The variable on the year of a permit most recently issued had to be alternated as below:

Year of permit 0 was set to 2000 if permit was obtained
 0 was set to =, if permit was not obtained
 b7r`i`k5b was set to =, if b7r`i`k5b==12
 1 was set to 2001
 2 was set to 2002
 3 was set to 2003
 4 was set to 2004
 6 was set to 2006
 98 was set to 1998
 99 was set to 1999

iii. List of Variables

elecacc05	byte	%21.0g	constr	Electricity Access
elecqua05	byte	%21.0g	constr	Electricity Quality
elecst05	byte	%8.0g		Electricity cost
elecacc02	byte	%21.0g	constr	Electricity Access, change since 2002
elecqua02	byte	%21.0g	constr	Electricity Quality, change since 2002
elecst02	byte	%8.0g		Electricity cost, change since 2002
fxlnacc05	byte	%21.0g	constr	Fixed line access, 2005
fxlnqua05	byte	%21.0g	constr	Fixed line quality, 2005
fxlnrst05	byte	%21.0g	constr	Fixed line cost, 2005
cellacc05	byte	%21.0g	constr	Cellular access, 2005
cellqua05	byte	%21.0g	constr	Cellular quality, 2005
cellrst05	byte	%21.0g	constr	Cellular cost, 2005
fxlnacc02	byte	%21.0g	constr	Fixed line access, change since 2002
fxlnqua02	byte	%21.0g	constr	Fixed line quality, change since 2002
fxlnrst02	byte	%21.0g	constr	Fixed line cost, change since 2002
cellacc02	byte	%21.0g	constr	Cellular access, change since 2002
cellqua02	byte	%21.0g	constr	Cellular quality, change since 2002
cellrst02	byte	%21.0g	constr	Cellular cost, change since 2002
watacc05	byte	%21.0g	constr	Water Access
waqua05	byte	%21.0g	constr	Water Quality
wacst05	byte	%21.0g	constr	Water Cost
watacc02	byte	%21.0g	constr	Water Access, change since 2002
waqua02	byte	%21.0g	constr	Water Quality, change since 2002
wacst02	byte	%21.0g	constr	Water Cost, change since 2002
postacc05	byte	%21.0g	constr	Postal Services, Access
postqua05	byte	%21.0g	constr	Postal Services, Quality
postrst05	byte	%21.0g	constr	Postal Services, Cost, change since 2002
postacc02	byte	%21.0g	constr	Postal Services, Access, change since 2002

postqua02	byte	%21.0g	constr	Postal Services. Quality. change since 2002
postcst02	byte	%21.0	constr	Postal. Service Cost
troacc05	byte	%21.0g	constr	Transportation. Road access
troqua05	byte	%21.0g	constr	Transportation. Road quality
trcst05	byte	%21.0g	constr	Transportation. Cost
trtraff05	byte	%21.0g	constr	Transportation. Traffic
trfac05	byte	%21.0g	constr	Transportation. Facilities to transport goods
troacc02	byte	%21.0g	constr	Transportation. Road access. change since 2002
troqua02	byte	%21.0g	constr	Transportation. Road quality. change since 2002
trcst02	byte	%21.0g	constr	Transportation. Cost. change since 2002
trtraff02	byte	%21.0g	constr	Transportation. Traffic. change since 2002
trfac02	byte	%21.0g	constr	Transportation. Facilities to transport goods. change since 2002
obstfam05	byte	%21.0g	constr	Possibility to borrow from family, friends or others
obstinst05	byte	%21.0g	constr	Possibility to borrow from formal financial institutions
obstirate05	byte	%21.0g	constr	Obstacle due to Interest rate
obstloanpro05	byte	%21.0g	constr	Complicated bank loan procedures (too many forms)
obstinstall05	byte	%8.0g		Fear of not being able to pay loan installments
obstfam02	byte	%21.0g	constr	Possibility to borrow from family, friends or others. change since 2002
obstinst02	byte	%21.0g	constr	Possibility to borrow from formal financial institutions. change since 2002
obstirate02	byte	%21.0g	constr	Obstacle due to Interest rate. change since 2002
obstloanpro02	byte	%21.0g	constr	Complicated bank loan procedures (too many forms). change since 2002
obstinstall02	byte	%8.0g		Fear of not being able to pay loan installments. change since 2002
accmark05	byte	%21.0g	constr	Access to markets(distance and cost)
infomark05	byte	%21.0g	constr	Difficulty to obtain information on your product's market
demmark05	byte	%21.0g	constr	Demand for goods and services produced
accmark02	byte	%21.0g	constr	Access to markets(distance and cost). change since 2002
infomark02	byte	%21.0g	constr	Difficulty to obtain information on your products market. change since 2002
demmark02	byte	%21.0g	constr	Demand for goods and services produced. change since 2002
corr05	byte	%21.0g	constr	Government: Corruption. 2005
corr02	byte	%21.0g	constr	Government: Corruption. change since 2002
b13rh2_02	byte	%21.0g	constr	Government. Uncertain economic policy
b13rh3_02	byte	%21.0g	constr	Government. Restrictive laws and regulations
b13ri1_05	byte	%21.0g	constr	Safety. Criminality. theft and lawlessness
b13ri2_05	byte	%21.0g	constr	Safety. Conflicts and social friction
b13ri1_02	byte	%21.0g	constr	Safety. Criminality. theft and lawlessness
b13ri2_02	byte	%21.0g	constr	Safety. Conflicts and social friction
lcktr05	byte	%21.0g	constr	Technology: Lack of Training. 2005
rescst05	byte	%21.0g	constr	Technology: Research Cost. 2005
acccomp05	byte	%21.0g	constr	Technology: Access to computers. 2005
accinf05	byte	%21.0g	constr	Technology: Access to information and technology. 2005
quainf05	byte	%21.0g	constr	Technology: Quality of information & technology. 2005
cstinf05	byte	%21.0g	constr	Technology: Cost of accessing information & technology. 2005
lcktr02	byte	%21.0g	constr	Technology: Lack of Training. change since 2002
rescst02	byte	%21.0g	constr	Technology: Research Cost. change since 2002
acccomp02	byte	%21.0g	constr	Technology: Access to computers. change since 2002
accinf02	byte	%21.0g	constr	Technology: Access to information and technology. change since 2002
quainf02	byte	%21.0g	constr	Technology: Quality of information & technology. change since 2002
cstinf02	byte	%21.0g	constr	Technology: Cost of accessing information & technology. change since 2002
regen05	byte	%21.0g	constr	Registration & Permits: Time & Cost of registering Enterprise. 2005

obtpm05	byte	%21.0g	constr	Registration & Permits: Time & Cost of obtaining Enterprise permits. 2005
compreg05	byte	%21.0g	constr	Registration & Permits: complicated regulations to register Enterprise & obtain
regen02	byte	%21.0g	constr	Registration & Permits: Time & Cost of registering Enterprise. change since 2002
obtpm02	byte	%21.0g	constr	Registration & Permits: Time & Cost of obtaining Enterprise permits. change since 2002
compreg02	byte	%21.0g	constr	Registration & Permits: complicated regulations to register Enterprise & obtain permit
htax05	byte	%21.0g	constr	Taxation: High taxes. 2005
comptax05	byte	%21.0g	constr	Taxation: complicated regulations to calculate & pay taxes. 2005
unlev05	byte	%21.0g	constr	Taxation: Unofficial levies. 2005
htax02	byte	%21.0g	constr	Taxation: High taxes. change since 2002
comptax02	byte	%21.0g	constr	Taxation: complicated regulations to calculate & pay taxes. change since 2002
unlev02	byte	%21.0g	constr	Taxation: Unofficial levies. change since 2002
rural	float	%9.0g		Urban=0/rural=1
entype	float	%9.0g		Type of firm. standalone=1. HHent.=2. Registered=3
sector	float	%9.0g		Sector of firm. production=1. trade=2. services=3
emplgrp	float	%10.0g		emplgrp Ent.groups by employment
kabu	float	%17.0g	kabu	Kabupaten
nomonths05	float	%9.0g		Average no of months worked unpaid. 2005
nomonths02	float	%9.0g		Average no of months worked unpaid. 2002
nodays05	float	%9.0g		Average no of days worked per month unpaid. 2005
nodays02	float	%9.0g		Average no of days worked per month unpaid. 2002
nohrs05	float	%9.0g		Average no of hours worked per day unpaid. 2005
nohrs02	float	%9.0g		Average no of hours worked per day unpaid. 2002
fillit	float	%9.0g		Illiterate full-time workers
funfin	float	%9.0g		Full-time workers unfinished elementary school
flow	float	%9.0g		Full-time workers finished elementary or junior high school
fhigh	float	%9.0g		Full-time workers finished high school or more
pillit	float	%9.0g		Illiterate part-time workers
punfin	float	%9.0g		Part-time workers unfinished elementary school
pflow	float	%9.0g		Part-time workers finished elementary or junior high school
phigh	float	%9.0g		Part-time workers finished high school or more
feduall	float	%9.0g		Full-time workers. all educational levels
peduall	float	%9.0g		Part-time workers. all educational levels
ftime	float	%9.0g		No. of full-time paid workers per enterprise. male + female
ftimem	float	%9.0g		Full-time paid male workers per enterprise
ftimef	float	%9.0g		Full-time paid female workers per enterprise
ptime	float	%9.0g		No. of part-time paid workers per enterprise. male + female
ptimem	float	%9.0g		Part-time paid male workers per enterprise
ptimef	float	%9.0g		Part-time paid female workers per enterprise
maleernpl	float	%9.0g		Male paid part-time and full-time per enterprise
femempl	float	%9.0g		Female paid part-time and full-time per enterprise
perff	float	%9.0g		Percentage of females among full-time workers
perfp	float	%9.0g		Percentage of females among part-time workers
perfillit	float	%9.0g		Percentage of illiterate per full-time total
perfunfin	float	%9.0g		percentage of full-time workers who unfinished elementary school
perflow	float	%9.0g		percentage of full-time workers finished element. school or jun. high
perfhigh	float	%9.0g		percentage full-time workers who finished high school or more
perpillit	float	%9.0g		Percentage of illiterate per part-time total

perpunfin	float	%9.0g	percentage of part-time workers who unfinished elementary school
perplow	float	%9.0g	percentage of part-time workers finished element. school or jun. high
perphigh	float	%9.0g	percentage part-time workers who finished high school or more
ttrainb	float	%9.0g	Total number of workers who received training before employed
ttrain	float	%9.0g	Total number of workers who received training from the enterprise
ftrainb	float	%9.0g	Full-time workers who received training before employed
ftrain	float	%9.0g	Full-time workers who received training from enterpr.
pttrainb	float	%9.0g	Part-time workers received training before employed
pttrain	float	%9.0g	Part-time workers received training from enterpr.
matrainb	float	%9.0g	Male workers received training before employed
matrain	float	%9.0g	Male workers.training from enterprise
fetrainb	float	%9.0g	Female workers.training before employed
fetrain	float	%9.0g	Female workers.training from enterprise
perfttrainb	float	%9.0g	percentage of full-time workers trained before employed
perfttrain	float	%9.0g	percentage of full-time workers trained by enterprise
perpttrainb	float	%9.0g	percentage of part-time workers trained before employ.
perpttrain	float	%9.0g	percentage part-time workers trained from enterprise
permatrainb	float	%9.0g	percentage male. trained before employed
permatrain	float	%9.0g	percentage male. trained from enterprise
perfetrainb	float	%9.0g	percentage female. trained before employed
perfetrain	float	%9.0g	percentage female. trained from enterprise
tun	float	%9.0g	Total workers unionized. part-time/full-time/male/female
fun	float	%9.0g	Full-time workers unionized
fmun	float	%9.0g	Full-time male workers unionized
ffun	float	%9.0g	Full-time female workers unionized
pun	float	%9.0g	Part-time workers unionized
pmun	float	%9.0g	part-time male workers unionized
pfun	float	%9.0g	part-time female workers unionized
perfmun	float	%9.0g	percentage full-time male unionized
perffun	float	%9.0g	percentage full-time female unionized
perpmun	float	%9.0g	percentage part-time male unionized
perpfun	float	%9.0g	percentage part-time female unionized
avwage05ftm	float	%9.0g	Aver.monthly wage full-time. male 2005
avwage05ftf	float	%9.0g	Aver.monthly wage full-time. female 2005
avwage05ptm	float	%9.0g	Aver.monthly wage part-time. male 2005
avwage05ptf	float	%9.0g	Aver.monthly wage part-time. female 2005
avwage05	float	%9.0g	Aver.monthly wage 2005
avwage05m	float	%9.0g	Aver.monthly wage male 2005
avwage05f	float	%9.0g	Aver.monthly wage female 2005
avwage05ft	float	%9.0g	Aver.monthly wage full-time 2005
avwage05pt	float	%9.0g	Aver.monthly wage part-time 2005
avwage02	float	%9.0g	Aver.monthly wage 2002
recruit05	float	%9.0g	Have you recruited any new skilled employees? (1=Yes. 2=no). 2005
recruit02	float	%9.0g	Have you recruited any new skilled employees? (1=Yes. 2=no). 2002
everfir05	float	%9.0g	Have you ever fired an unskilled employee? (1=Yes. 2=no). 2005
everfir02	float	%9.0g	Have you ever fired an unskilled employee? (1=Yes. 2=no). 2002
mnewemp05	float	%9.0g	days needed to hire a new employee to fill an opening 2005
mnewemp02	float	%9.0g	days needed to hire a new employee to fill an opening 2002
munfir05	float	%9.0g	no. unskilled employees fired 2005 among firms that have already fired employees
munfir02	float	%9.0g	no. unskilled employees fired 2002 among firms that have already fired employees
mdfire05	float	%9.0g	days needed to fire an unskilled employee 2005

mdfire02	float	%9.0g	days needed to fire an unskilled employee 2002
chnempl05	float	%9.0g	If you could freely change number of employees. how would you do so. 2005?
chnempl02	float	%9.0g	If you could freely change number of employees. how would you do so. 2002?
mlobst_1	str2	%9s	One of the labor obstacles is the most important obstacle
mlobst_2	str2	%9s	One of the labor obstacles is the second most important obstacle
mlobst_3	str2	%9s	One of the labor obstacles is the third most important obstacle
mlobst_4	str2	%9s	One of the labor obstacles is the fourth most important obstacle
mlobstrem_1	float	%9.0g	% income change if one of the labor obstacles was removed. most important obstac
mlobstrem_2	float	%9.0g	% income change if one of the labor obstacles was removed. second most importan
mlobstrem_3	float	%9.0g	% income change if one of the labor obstacles was removed. third most important
mlobstrem_4	float	%9.0g	% income change if one of the labor obstacles was removed. fourth most important
moagr	float	%9.0g	Initial capital as own money/assets from agriculture. %
monoriagr	float	%9.0g	Initial capital as own money/assets from non-agriculture. %
lofo	float	%9.0g	Initial capital formal loan. %
loinfo	float	%9.0g	Initial capital informal loan. %
gift	float	%9.0g	Initial capital gift.%
receivC5	float	%9.0g	Receivable 2005.current assets and loan structure
receivC2	float	%9.0g	Receivable 2002.current assets and loan structure
cash05	float	%9.0g	Cash 2005.current assets and loan structure
cash02	float	%9.0g	Cash 2002.current assets and loan structure
save05	float	%9.0g	Savings 2005.current assets and loan structure
save02	float	%9.0g	Savings 2002.current assets and loan structure
lobank05	float	%9.0g	Loan or credit from bank 2005
lobank02	float	%9.0g	Loan or credit from bank 2002
losupp05	float	%9.0g	Loan or credit from suppliers 2005
losupp02	float	%9.0g	Loan or credit from suppliers 2002
lofrfa05	float	%9.0g	Loan or credit from friends or family 2005
lofrfa02	float	%9.0g	Loan or credit from friends or family 2002
looth05	float	%9.0g	Loan or credit.other 2005
looth02	float	%9.0g	Loan or credit.other 2002
loan	float	%9.0g	Enterprises that have ever applied for a loan or credit
app1	float	%9.0g	1st loan approved
app2	float	%9.0g	2nd loan approved
app3	float	%9.0g	3rd loan approved
app4	float	%9.0g	4th loan approved
app5	float	%9.0g	5th loan approved
app6	float	%9.0g	6th loan approved
app7	float	%9.0g	7th loan approved
tapp_y	float	%9.0g	Loan approved. 1.-7.loan
tapp_n	float	%9.0g	Loan not approved. 1.-7.loan
tapp_p	float	%9.0g	Loan in process. 1.-7.loan
tneed1	float	%9.0g	1.loan.time needed
tneed2	float	%9.0g	2.loan.time needed
tneed3	float	%9.0g	3.loan.time needed
tneed4	float	%9.0g	4.loan.time needed
tneed5	float	%9.0g	5.loan.time needed
tneed6	float	%9.0g	6.loan.time needed
tneed7	float	%9.0g	7.loan.time needed

tneed_1	float	%9.0g	No of loans which were granted in less than 1 week. 1.- 7.loan
tneed_2	float	%9.0g	No of loans which were granted in less than 1 month. 1.- 7.loan
tneed_3	float	%9.0g	No of loans which were granted in less than 3 months.1.-7.loan
tneed_4	float	%9.0g	No of loans which were granted in less than 6 months. 1.-7.loan
tneed_5	float	%9.0g	No of loans which were granted in less than 1 year. 1.- 7.loan
tneed_6	float	%9.0g	No of loans which were granted in more than 1 year. 1.- 7.loan
source1	float	%9.0g	1.loan, loan source
source2	float	%9.0g	2.loan, loan source
source3	float	%9.0g	3.loan, loan source
source4	float	%9.0g	4.loan, loan source
source5	float	%9.0g	5.loan, loan source
source6	float	%9.0g	6.loan, loan source
source7	float	%9.0g	7.loan, loan source
objec1	float	%9.0g	1.loan, objective
objec2	float	%9.0g	2.loan, objective
objec3	float	%9.0g	3.loan, objective
objec4	float	%9.0g	4.loan, objective
objec5	float	%9.0g	5.loan, objective
objec6	float	%9.0g	6.loan, objective
objec7	float	%9.0g	7.loan, objective
intper1	float	%9.0g	1.loan, interest rate as a % of loan
intper2	float	%9.0g	2.loan, interest rate as a % of loan
intper3	float	%9.0g	3.loan, interest rate as a % of loan
intper4	float	%9.0g	4.loan, interest rate as a % of loan
intper5	float	%9.0g	5.loan, interest rate as a % of loan
intper6	float	%9.0g	6.loan, interest rate as a % of loan
intper7	float	%9.0g	7.loan, interest rate as a % of loan
inttime1	float	%9.0g	Interest in time unit. 1.loan
inttime2	float	%9.0g	Interest in time unit. 2.loan
inttime3	float	%9.0g	Interest in time unit. 3.loan
inttime4	float	%9.0g	Interest in time unit. 4.loan
inttime5	float	%9.0g	Interest in time unit. 5.loan
inttime6	float	%9.0g	Interest in time unit. 6.loan
inttime7	float	%9.0g	Interest in time unit. 7.loan
inttime_1	float	%9.0g	Time unit of interest. weekly
inttime_2	float	%9.0g	Time unit of interest. monthly
inttime_3	float	%9.0g	Interest of loans in time unit. quarterly
inttime_4	float	%9.0g	Interest of loans in time unit. biannually
inttime_5	float	%9.0g	Interest of loans in time unit. yearly
inttype1	float	%9.0g	Interest type. 1.loan
inttype2	float	%9.0g	Interest type. 2.loan
inttype3	float	%9.0g	Interest type. 3.loan
inttype4	float	%9.0g	Interest type. 4.loan
inttype5	float	%9.0g	Interest type. 5.loan
inttype6	float	%9.0g	Interest type. 6.loan
inttype7	float	%9.0g	Interest type. 7.loan
inttype_1	float	%9.0g	Interest type. flat (fixed interest)
inttype_2	float	%9.0g	Interest type. flat (fixed interest)
amloan	float	%9.0g	Aver. amount received as loan
aploan	float	%9.0g	Aver. amount applied for
avamloan	float	%9.0g	Average amount received as loan, corrected
avaploan	float	%9.0g	Aver. amount applied for, corrected
leloan	float	%9.0g	Aver. lenght of loans. months
avleloan	float	%9.0g	Aver. lenght of loans. months. corrected

coll_y	float	%9.0g	Collateral used. 1.-7.loan
coll_1	float	%9.0g	Land used as collateral. 1.-7.loan
coll_2	float	%9.0g	Building used as collateral. 1.-7.loan
coll_3	float	%9.0g	House used as collateral. 1.-7.loan
coll_4	float	%9.0g	Machinery used as collateral. 1.-7.loan
coll_5	float	%9.0g	Other valuable goods used as collateral. 1.-7.loan
coll_6	float	%9.0g	Other used as collateral. 1.-7.loan
loneed	float	%9.0g	estimated value of loan needed. as %of loan
avloneed	float	%9.0g	Average estimated value of loan needed. as %of loan. corrected
amrep	float	%9.0g	amount repaid. as a percentage of initial loan
avamrep	float	%9.0g	Average amount repaid. as a percentage of initial loan. corrected
aviind	float	%9.0g	annual interest rate. individual creditor
matcred	float	%9.0g	In one year. what % of materials/inputs used are usually paid for with credit?
payoff	float	%9.0g	Time it took to pay off the debt (days)
fundspent	float	%9.0g	If having additional funding. what would you spend it primarily on?
monbcrr	float	%9.0g	Amount of money needed to borrow (000 Rp)
noborrow	float	%50.0g	noborrow/b Why wouldn't you borrow from a formal financial Institution?
fobst05	float	%9.0g	Obstacles. Financial services. 2005
fobst02	float	%9.0g	Obstacles. Financial services. change since 2002
mfobst_1	str2	%9s	One of the financial obstacles is the most important obstacle
mfobst_2	str2	%9s	One of the financial obstacles is the second most important obstacle
mfobst_3	str2	%9s	One of the financial obstacles is the third most important obstacle
mfobst_4	str2	%9s	One of the financial obstacles is the fourth most important obstacle
mfobstrem_1	float	%9.0g	% income change if one of the financial obstacles was removed. most important obstacle
mfobstrem_2	float	%9.0g	% income change if one of the financial obstacles was removed. second most important obstacle
mfobstrem_3	float	%9.0g	% income change if one of the financial obstacles was removed. third most important obstacle
mfobstrem_4	float	%9.0g	% income change if one of the financial obstacles was removed. fourth most important obstacle
methelec	float	%9.0g	Method of electricity generation used by the provider. 2005
avblack_d	float	%9.0g	Average days blackouts or power surges experienced in one month. 2005
avblack_t	float	%9.0g	On average how many times do you experience blackouts or power surges in one month
avblack_l	float	%9.0g	Average length each blackout lasts (minutes). 2005
lossblack	float	%9.0g	Revenue loss from blackouts (000 Rp). 2005
lossblack02	float	%9.0g	How did this loss compare to 2002?
newconn	float	%9.0g	Did you apply for a new electricity connection from PLN(and got connected) in 20
elecconn	float	%9.0g	Average days to get a new electricity connection. 2005
landl05	float	%9.0g	Does your business have a landline telephone. 2005
landl02	float	%9.0g	Does your business have a landline telephone. 2002
newlandl	float	%9.0g	Possibility to get a new landline telephone connection. 2005
nwlndcst05	float	%9.0g	Cost of getting a new landline telephone connection. 2005 (000Rp)
nwlndcst02	float	%9.0g	Cost of getting a new landline telephone connection. 2002 (000Rp)
nwlnddys05	float	%9.0g	Days to get a new landline telephone connection. 2005
nwlnddys02	float	%9.0g	Days to get a new landline telephone connection. 2002
cellbiz05	float	%9.0g	Does anyone in your enterprise use cellular phones to do business. 2005

cellbiz02	float	%9.0g	Does anyone in your enterprise use cellular phones to do business. 2002
fax05	float	%9.0g	Does your Enterprises send/receive faxes. 2005
fax02	float	%9.0g	Does your Enterprises send/receive faxes. 2002
pc05	float	%9.0g	Enterprises using a computer in their business. 2005
pc02	float	%9.0g	Enterprises using a computer in their business. 2002
webs05	float	%9.0g	Enterprises having/using a website. 2005
webs02	float	%9.0g	Enterprises having/using a website. 2002
email05	float	%9.0g	Enterprises having/using email. 2005
email02	float	%9.0g	Enterprises having/using email. 2002
assoc05	float	%9.0g	Enterprises being a member of a trade or business association. 2005
assoc02	float	%9.0g	Enterprises being a member of a trade or business association. 2002
benassoc	float	%78.0g	benassoclb Benefits of joining an association: Information
othben	str20	%20s	Other Benefits of joining an association
wasource	float	%35.0g	wasourcelb Water source
wacstlc	float	%9.0g	Cost per m3 (000 Rp). local gov. owned pipes
wacstpri	float	%9.0g	Cost per m3 (000 Rp). private water Enterprise
watime	float	%9.0g	Time needed to get a new pipe connection (days). PDAM
miobst_1	str2	%9s	One of the infrastructure obstacles is the most important obstacle
miobst_2	str2	%9s	One of the infrastructure obstacles is the second most important obstacle
miobst_3	str2	%9s	One of the infrastructure obstacles is the third most important obstacle
miobst_4	str2	%9s	One of the infrastructure obstacles is the fourth most important obstacle
miobstrem_1	float	%9.0g	% income change if one of the infrastructure obstacles was removed. most importa
miobstrem_2	float	%9.0g	% income change if one of the infrastructure obstacles was removed. second most
miobstrem_3	float	%9.0g	% income change if one of the infrastructure obstacles was removed. third most
miobstrem_4	float	%9.0g	% income change if one of the infrastructure obstacles was removed. fourth most
comp	float	%9.0g	Type of company
locsls05_p	float	%9.0g	Location of where the majority of total sales are made to consumers. processing
locsls02_p	float	%9.0g	Location of where the majority of your total sales are made to onsumers.process
sld05_p	float	%9.0g	Total domestic sales. %. 2005. processing firm
totsld05_p	float	%9.0g	Total domestic sales. %. 2005. processing firm. corrected
pgvsls05_p	float	%9.0g	% of sales sold to government. 2005
ptrasld05_p	float	%9.0g	% of sales sold to traders. 2005
pmulsls05_p	float	%9.0g	% of sales sold to domest. multinational enterpr.. 2005
pparsld05_p	float	%9.0g	% of sales sold to parent enterpr. or branch of this enterpr.. 2005
plarsld05_p	float	%9.0g	% of sales sold to large domes. enterpr. (>300 workers). 2005
pagrsls05_p	float	%9.0g	% of sales sold to agricultural enterpr.. 2005
pconsls05_p	float	%9.0g	% of sales sold to consumers. 2005
pothsls05_p	float	%9.0g	% of sales sold to other. 2005
sld02_p	float	%9.0g	Total domestic sales. %. 2002. processing firm
totsld02_p	float	%9.0g	Total domestic sales. %. 2002. processing firm. corrected
pgvsls02_p	float	%9.0g	% of sales sold to government. 2002
ptrasld02_p	float	%9.0g	% of sales sold to traders. 2002
pmulsls02_p	float	%9.0g	% of sales sold to domest. multinational enterpr.. 2002
pparsld02_p	float	%9.0g	% of sales sold to parent enterpr. or branch of this enterpr.. 2002

plarsld02_p	float	%9.0g	% of sales sold to large domes. enterpr. (>300 workers). 2002
pagrslld02_p	float	%9.0g	% of sales sold to agricultural enterpr.. 2002
pconslld02_p	float	%9.0g	% of sales sold to consumers. 2002
pothslld02_p	float	%9.0g	% of sales sold to other. 2002
pcontr05_p	float	%9.0g	% of sales based on written or verbal contracts. processing firm. 2005
pcontr02_p	float	%9.0g	% of sales based on written or verbal contracts. processing firm. 2002
locinp05_p	float	%9.0g	Location where inputs used are made at. processing firm. 2005
locinp02_p	float	%9.0g	Location where inputs used are made at. processing firm. 2002
pincon05_p	float	%9.0g	% of material inputs bought through agreements or contracts. processing firm
pincon02_p	float	%9.0g	% of material inputs bought through agreements or contracts. processing firm
mat05_p	float	%9.0g	Total material goods bought.%. 2005
tmat05_p	float	%9.0g	Total material goods bought.%. 2005. corrected
unpr05_p	float	%9.0g	% unprocessed agricultural goods of material goods bought. 2005
pr05_p	float	%9.0g	% processed agricultural goods of material goods bought. 2005
non05_p	float	%9.0g	% non-agricultural goods of material goods bought. 2005
mat02_p	float	%9.0g	Total material goods bought.%. 2002
tmat02_p	float	%9.0g	Total material goods bought.%. 2002. corrected
unpr02_p	float	%9.0g	% unprocessed agricultural goods of material goods bought. 2002
pr02_p	float	%9.0g	% processed agricultural goods of material goods bought. 2002
non02_p	float	%9.0g	% non-agricultural goods of material goods bought. 2002
compvill_p	str1	%9s	monthly average of competitors. same village. processing firm
suppvill_p	str1	%9s	monthly average of suppliers. same village. processing firm
buyvill_p	str1	%9s	monthly average of buyers. same village. processing firm
compsubd_p	str1	%9s	monthly average of competitors. same subdistrict. processing firm
suppsubd_p	str1	%9s	monthly average of suppliers. same subdistrict. processing firm
buysubd_p	str1	%9s	monthly average of buyers. same subdistrict. processing firm
compdis_p	str1	%9s	monthly average of competitors. same district. processing firm
suppdis_p	str1	%9s	monthly average of suppliers. same district. processing firm
buydis_p	str1	%9s	monthly average of buyers. same district. processing firm
comppr_p	str1	%9s	monthly average of competitors. same province. processing firm
suppr_p	str1	%9s	monthly average of suppliers. same province. processing firm
buypr_p	str1	%9s	monthly average of buyers. same province. processing firm
pr_p	float	%9.0g	Problems with competitors, suppliers or buyers in the last 3 years. processing firm
solpr_p	float	%56.0g	solpr_plb Way of solving these problems. processing firm
locsls05_t	float	%9.0g	Location of where the majority of commodities are sold. trade company. 2005
locsls02_t	float	%9.0g	Location of where the majority of commodities are sold. trade company. 2002
sld05_t	float	%9.0g	Total domestic sales. %. 2005. trade company
totsld05_t	float	%9.0g	Total domestic sales. %. 2005. trade company. corrected
pgvslld05_t	float	%9.0g	% of sales sold to government. 2005
pmulslld05_t	float	%9.0g	% of sales sold to domest. multinational enterpr.. 2005
pparsld05_t	float	%9.0g	% of sales sold to parent enterpr. or branch of this enterpr.. 2005
plarsld05_t	float	%9.0g	% of sales sold to large domes. enterpr. (>300 workers). 2005
pagrslld05_t	float	%9.0g	% of sales sold to agricultural enterpr.. 2005
pconslld05_t	float	%9.0g	% of sales sold to consumers. 2005
pothslld05_t	float	%9.0g	% of sales sold to other. 2005
sld02_t	float	%9.0g	Total domestic sales. %. 2002. trade company
totsld02_t	float	%9.0g	Total domestic sales. %. 2002. trade company. corrected
pgvslld02_t	float	%9.0g	% of sales sold to government. 2002
pmulslld02_t	float	%9.0g	% of sales sold to domest. multinational enterpr.. 2002

pparsld02_t	float	%9.0g		% of sales sold to parent enterpr. or branch of this enterpr., 2002
plarsld02_t	float	%9.0g		% of sales sold to large domes. enterpr. (>300 workers), 2002
pagrsl02_t	float	%9.0g		% of sales sold to agricultural enterpr., 2002
pconsl02_t	float	%9.0g		% of sales sold to consumers, 2002
pothsl02_t	float	%9.0g		% of sales sold to other, 2002
pcontr05_t	float	%9.0g		% of commodity sales based on written or verbal contracts, trade firm, 2005
pcontr02_t	float	%9.0g		% of commodity sales based on written or verbal contracts, trade firm, 2002
locinp05_t	float	%9.0g		Location where commodities sold are bought at, trade firm, 2005
locinp02_t	float	%9.0g		Location where commodities sold are bought at, trade firm, 2002
pincon05_t	float	%9.0g		% of commodities bought through agreements or contracts, trade firm, 2005
pincon02_t	float	%9.0g		percentage of commodities bought through agreements or contracts, trade firm, 200
sal05_t	float	%9.0g		Total of Enterprise's sales,%, 2005
tsal05_t	float	%9.0g		Total of Enterprise's sales,%. 2005, corrected
unpr05_t	float	%9.0g		% unprocessed agricultural goods of total sales, 2005
pr05_t	float	%9.0g		% processed agricultural goods of total sales, 2005
non05_t	float	%9.0g		% non-agricultural goods of total sales, 2005
sal02_t	float	%9.0g		Total of Enterprise's sales,%. 2002
tsal02_t	float	%9.0g		Total of Enterprise's sales,%. 2002, corrected
unpr02_t	float	%9.0g		% unprocessed agricultural goods of total sales, 2002
pr02_t	float	%9.0g		% processed agricultural goods of total sales, 2002
non02_t	float	%9.0g		% non-agricultural goods of total sales, 2002
compvill_t	str1	%9s		monthly average of competitors, same village, trade firm
suppvill_t	str1	%9s		monthly average of suppliers, same village, trade firm
buyvill_t	str1	%9s		monthly average of buyers, same village, trade firm
compsubd_t	str1	%9s		monthly average of competitors, same subdistrict, trade firm
suppsubd_t	str1	%9s		monthly average of suppliers, same subdistrict, trade firm
buysubd_t	str1	%9s		monthly average of buyers, same subdistrict, trade firm
compdis_t	str1	%9s		monthly average of competitors, same district, trade firm
suppdis_t	str1	%9s		monthly average of suppliers, same district, trade firm
buydis_t	str1	%9s		monthly average of buyers, same district, trade firm
comppr_t	str1	%9s		monthly average of competitors, same province, trade firm
suppr_t	str1	%9s		monthly average of suppliers, same province, trade firm
buypr_t	str1	%9s		monthly average of buyers, same province, trade firm
pr_t	float	%9.0g		Problems with competitors, suppliers or buyers in the last 3 years, trade firm
solpr_t	float	%66.0g	solpr_tlb	Way of solving these problems, trade firm
locsls05_s	float	%9.0g		Location of where the majority of sales are made, Service Enterprise, 2005
locsls02_s	float	%9.0g		Location of where the majority of sales are made, Service Enterprise, 2002
sld05_s	float	%9.0g		Total domestic sales, %, 2005, service ent.
totsld05_s	float	%9.0g		Total domestic sales, %, 2005, service ent., corrected
pgvsl05_s	float	%9.0g		% of sales sold to government, 2005, service ent.
pmulsl05_s	float	%9.0g		% of sales sold to domest. multinational enterpr., 2005, service ent.
pparsld05_s	float	%9.0g		% of sales sold to parent enterpr. or branch of this enterpr., 2005, service ent
plarsld05_s	float	%9.0g		% of sales sold to large domest. enterpr. (>300 workers), 2005, service ent.
pagrsl05_s	float	%9.0g		% of sales sold to agricultural enterpr., 2005, service ent.
pconsl05_s	float	%9.0g		% of sales sold to consumers, 2005, service ent.

pothslid05_s	float	%9.0g	% of sales sold to other. 2005. service ent.
sld02_s	float	%9.0g	Total domestic sales. %. 2002. service ent.
totsld02_s	float	%9.0g	Total domestic sales. %. 2002. service ent., corrected
pgvslid02_s	float	%9.0g	% of sales sold to government. 2002. service ent.
pmulslid02_s	float	%9.0g	% of sales sold to domest. multinational enterpr.. 2002. service ent.
pparsld02_s	float	%9.0g	% of sales sold to parent enterpr. or branch of this enterpr.. 2002. service ent
plarsld02_s	float	%9.0g	% of sales sold to large domes. enterpr. (>300 workers). 2002. service ent.
pagrslid02_s	float	%9.0g	% of sales sold to agricultural enterpr.. 2002. service ent.
pconslid02_s	float	%9.0g	% of sales sold to consumers. 2002. service ent.
pothslid02_s	float	%9.0g	% of sales sold to other. 2002. service ent.
pcontr05_s	float	%9.0g	% of commodity sales based on written or verbal contracts. Service Enterprise. 2005
pcontr02_s	float	%9.0g	% of commodity sales based on written or verbal contracts. Service Enterprise. 2002
serv05_s	float	%9.0g	Total income. %. 2005. service ent.
tserv05_s	float	%9.0g	Total income. %. 2005. service ent., corrected
phot05_s	float	%9.0g	% of income from hotels. 2005
prest05_s	float	%9.0g	% of income from restaurants. 2005
ptrans05_s	float	%9.0g	% of income from transportation. 2005
pfinan05_s	float	%9.0g	% of income from financial services. 2005
pothbus:05_s	float	%9.0g	% of income from other business serv.. 2005
ppriv05_s	float	%9.0g	% of income from private individ. serv.. 2005
serv02_s	float	%9.0g	Total income. %. 2002. service ent.
tserv02_s	float	%9.0g	Total income. %. 2002. service ent., corrected
phot02_s	float	%9.0g	% of income from hotels. 2002
prest02_s	float	%9.0g	% of income from restaurants. 2002
ptrans02_s	float	%9.0g	% of income from transportation. 2002
pfinan02_s	float	%9.0g	% of income from financial services. 2002
pothbus:02_s	float	%9.0g	% of income from other business serv.. 2002
ppriv02_s	float	%9.0g	% of income from private individ. serv.. 2002
mmobs:_1	str2	%9s	One of the market obstacles is the most important obstacle
mmobs:_2	str2	%9s	One of the market obstacles is the second most important obstacle
mmobs:_3	str2	%9s	One of the market obstacles is the third most important obstacle
mmobs:_4	str2	%9s	One of the market obstacles is the fourth most important obstacle
mmobs:rem_1	float	%9.0g	% income change if one of the market obstacles was removed. most important obstacle
mmobs:rem_2	float	%9.0g	% income change if one of the market obstacles was removed. second most important obstacle
mmobs:rem_3	float	%9.0g	% income change if one of the market obstacles was removed. third most important obstacle
mmobs:rem_4	float	%9.0g	% income change if one of the market obstacles was removed. fourth most important obstacle
innmntl	float	%9.0g	Year the innovation was implemented
innyr	float	%9.0g	
mtobst_1	str2	%9s	One of the technology obstacles is the most important obstacle
mtobst_2	str2	%9s	One of the technology obstacles is the second most important obstacle
mtobst_3	str2	%9s	One of the technology obstacles is the third most important obstacle
mtobst_4	str2	%9s	One of the technology obstacles is the fourth most important obstacle

mtobstrem_1	float	%9.0g	% income change if one of the technology obstacles was removed. most important o
mtobstrem_2	float	%9.0g	% income change if one of the technology obstacles was removed. second most imp
mtobstrem_3	float	%9.0g	% income change if one of the technology obstacles was removed. third most impo
mtobstrem_4	float	%9.0g	% income change if one of the technology obstacles was removed. fourth most impo
cgov05	float	%9.0g	Total Central government Taxes. 2005
inct05_c	float	%9.0g	Income tax. %. 2005
landt05_c	float	%9.0g	Land & Buildings Tax. %. 2005
valad05_c	float	%9.0g	Value added tax. %. 2005
cust05_c	float	%9.0g	Customs. %. 2005
otht05_c	float	%9.0g	other taxes by central gov.. %. 2005
unofft05_c	float	%9.0g	Unofficial levies by centr. gov.. %. 2005
cgov02	float	%9.0g	Total Central government Taxes. 2002
inct02_c	float	%9.0g	Income tax. %. 2002
landt02_c	float	%9.0g	Land & Buildings Tax. %. 2002
valad02_c	float	%9.0g	Value added tax. %. 2002
cust02_c	float	%9.0g	Customs. %. 2002
otht02_c	float	%9.0g	other taxes by central gov.. %. 2002
unofft02_c	float	%9.0g	Unofficial levies by centr. gov.. %. 2002
pgov05	float	%9.0g	Total province government Taxes. 2005
veht05_p	float	%9.0g	Motorized vehicle tax.%. 2005
chvehownt05_p	float	%9.0g	Tax on changing vehicle ownership. %. 2005
otht05_p	float	%9.0g	Other taxes by province gov.. %. 2005
unofft05_p	float	%9.0g	Unofficial levies by province gov.. %. 2005
pgov02	float	%9.0g	Total province government Taxes. 2002
veht02_p	float	%9.0g	Motorized vehicle tax.%. 2002
chvehownt02_p	float	%9.0g	Tax on changing vehicle ownership. %. 2002
otht02_p	float	%9.0g	Other taxes by province gov.. %. 2002
unofft02_p	float	%9.0g	Unofficial levies by province gov.. %. 2002
rgov05	float	%9.0g	Total region government Taxes. 2005
hot05_r	float	%9.0g	Hotel taxes. %. 2005
rest05_r	float	%9.0g	Restaurant taxes. %. 2005
enter05_r	float	%9.0g	Entertainment taxes. %. 2005
advert05_r	float	%9.0g	Advertising taxes. %. 2005
cmin05_r	float	%9.0g	Class C mining taxes. %. 2005
otht05_r	float	%9.0g	Other regional gov. taxes. %. 2005
unofft05_r	float	%9.0g	Unofficial levies. %. 2005
rgov02	float	%9.0g	Total region government Taxes. 2002
hot02_r	float	%9.0g	Hotel taxes. %. 2002
rest02_r	float	%9.0g	Restaurant taxes. %. 2002
enter02_r	float	%9.0g	Entertainment taxes. %. 2002
advert02_r	float	%9.0g	Advertising taxes. %. 2002
cmin02_r	float	%9.0g	Class C mining taxes. %. 2002
otht02_r	float	%9.0g	Other regional gov. taxes. %. 2002
unofft02_r	float	%9.0g	Unofficial levies. %. 2002
othlev05	float	%9.0g	Total Other Levies. 2005
secoff05_o	float	%9.0g	Levies to security officials. %. 2005
thug05_o	float	%9.0g	Levies to thugs. %. 2005
villoff05_o	float	%9.0g	Levies to sub-region and/or village officials. %. 2005
otht05_o	float	%9.0g	Other Levies. %. 2005
othlev02	float	%9.0g	Total Other Levies. 2002

secoff02_o	float	%9.0g	Levies to security officials. %. 2002
thug02_o	float	%9.0g	Levies to thugs. %. 2002
villoff02_o	float	%9.0g	Levies to sub-region and/or village officials. %. 2002
otht02_o	float	%9.0g	Other Levies. %. 2002
tottax05	float	%9.0g	Total Taxes and Levies. 2005
p_cgov05	float	%9.0g	Sub total central gov. taxes. %. 2005
p_pgov05	float	%9.0g	Sub total province gov. taxes. %. 2005
p_rgov05	float	%9.0g	Sub total region gov. taxes. %. 2005
p_othlev05	float	%9.0g	Sub total Other Levies. %. 2005
tottax02	float	%9.0g	Total Taxes and Levies. 2002
p_cgov02	float	%9.0g	Sub total central gov. taxes. %. 2002
p_pgov02	float	%9.0g	Sub total province gov. taxes. %. 2002
p_rgov02	float	%9.0g	Sub total region gov. taxes. %. 2002
p_othlev02	float	%9.0g	Sub total Other Levies. %. 2002
perm_y	float	%9.0g	Permit received. all different fields
reabldprm	float	%9.0g	Reason for which enterprise does not have Building permit
reaindprm	float	%9.0g	Reason for which enterprise does not have Industrial permit
reaentreg	float	%9.0g	Reason for which enterprise does not have enterprise registration
reatrdprm	float	%9.0g	Reason for which enterprise does not have trade permit
reaelecapp	float	%9.0g	Reason for which enterprise does not have commercial electr. connect.
reasfprm	float	%9.0g	Reason for which enterprise does not have Work safety permit/P2K3
reaotha	float	%9.0g	Reason for which enterprise does not have other a permit
reaothb	float	%9.0g	Reason for which enterprise does not have other b permit
reaothc	float	%9.0g	Reason for which enterprise does not have other c permit
necbldprm	float	%9.0g	Is Building permit necessary? 1=Yes/2=No/3=I don't know
necindprm	float	%9.0g	Is Industrial permit necessary? 1=Yes/2=No/3=I don't know
necentreg	float	%9.0g	Is Enterprise registration necessary? 1=Yes/2=No/3=I don't know
nectrdprm	float	%9.0g	Is Trade permit necessary? 1=Yes/2=No/3=I don't know
necelecapp	float	%9.0g	Is Applic. for a commercial electr. connect. necessary? 1=Yes/2=No/3=I don't know
necsfprm	float	%9.0g	Is Work safety permit/P2K3 necessary? 1=Yes/2=No/3=I don't know
necbldprm_y	float	%9.0g	Is Building permit necessary for case that firm has permit? 1=Yes/2=No/3=I don't know
necbldprm_n	float	%9.0g	Is Building permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necindprm_y	float	%9.0g	Is Industrial permit necessary for case that firm has permit? 1=Yes/2=No/3=I don't know
necindprm_n	float	%9.0g	Is Industrial permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necentreg_y	float	%9.0g	Is enterprise registration necessary for case that firm has permit? 1=Yes/2=No/3=I don't know
necentreg_n	float	%9.0g	Is enterprise registration necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
nectrdprm_y	float	%9.0g	Is trade permit necessary for case that firm has permit? 1=Yes/2=No/3=I don't know
nectrdprm_n	float	%9.0g	Is trade permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necelecapp_y	float	%9.0g	Is Applic. for a commercial electr. connect. necessary for case that firm has permit
necelecapp_n	float	%9.0g	Is Applic. for a commercial electr. connect. necessary for case that firm does not have permit
necsfprm_y	float	%9.0g	Is Work safety permit/P2K3 necessary for case that firm has permit? 1=Yes/2=No/3=I don't know

necsfepm_n	float	%9.0g	Is Work safety permit/P2K3 necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necotha_y	float	%9.0g	Is other a permit necessary for case that firm has permit? 1=Yes/2=No/ 3=I don't know
necotha_n	float	%9.0g	Is other a permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necothb_y	float	%9.0g	Is other b permit necessary for case that firm has permit? 1=Yes/2=No/ 3=I don't know
necothb_n	float	%9.0g	Is other b permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
necothe_y	float	%9.0g	Is other c permit necessary for case that firm has permit? 1=Yes/2=No/ 3=I don't know
necothe_n	float	%9.0g	Is other c permit necessary for case that firm does not have permit? 1=Yes/2=No/3=I don't know
mbldprm	float	%9.0g	Month of building permit most recently issued
ybldprm	float	%9.0g	Year of building permit most recently issued
mindprm	float	%9.0g	Month of Industrial permit most recently issued
yindprm	float	%9.0g	Year of Industrial permit most recently issued
mentreg	float	%9.0g	Month of enterprise registration most recently issued
yentreg	float	%9.0g	Year of enterprise registration most recently issued
mtrdprm	float	%9.0g	Month of trade permit most recently issued
ytrdprm	float	%9.0g	Year of trade permit most recently issued
melecapp	float	%9.0g	Month of Applic. for a commercial electr. connect. most recently issued
yelecapp	float	%9.0g	Year of Applic. for a commercial electr. connect. most recently issued
msfepm	float	%9.0g	Month of Work safety permit/P2K3 most recently issued
ysfepm	float	%9.0g	Year of Work safety permit/P2K3 most recently issued
motha	float	%9.0g	Month of other a permit most recently issued
yotha	float	%9.0g	Year of other a permit most recently issued
mothb	float	%9.0g	Month of other b permit most recently issued
yothb	float	%9.0g	Year of other b permit most recently issued
mothc	float	%9.0g	Month of other c permit most recently issued
yothc	float	%9.0g	Year of other c permit most recently issued
whbldprm	float	%9.0g	Where do you obtain or register for building permit
whindprm	float	%9.0g	Where do you obtain or register for industrial permit
whentreg	float	%9.0g	Where do you obtain or register for enterprise registration
whtrdprm	float	%9.0g	Where do you obtain or register for trade permit
whelecapp	float	%9.0g	Where do you obtain or register for Applic. for a commercial electr. connect.
whsfepm	float	%9.0g	Where do you obtain or register for Work safety permit/P2K3
whotha	float	%9.0g	Where do you obtain or register for other a permit
whothb	float	%9.0g	Where do you obtain or register for other b permit
whothc	float	%9.0g	Where do you obtain or register for other c permit
vldprm	float	%9.0g	Validity (years). building permit
vindprm	float	%9.0g	Validity (years). industrial permit
ventreg	float	%9.0g	Validity (years). enterprise registration
vtrdprm	float	%9.0g	Validity (years). trade permit
velecapp	float	%9.0g	Validity (years). Applic. for a commercial electr. connect.
vsfepm	float	%9.0g	Validity (years). Work safety permit/P2K3
votha	float	%9.0g	Validity (years). other a permit
vothb	float	%9.0g	Validity (years). other b permit
vothc	float	%9.0g	Validity (years). other c permit
tbldprm	float	%9.0g	Time to get the last building permit (work days)
tindprm	float	%9.0g	Time to get the last industrial permit (work days)

tentreg	float	%9.0g	Time to get the last enterprise registration (work days)
ttrdprm	float	%9.0g	Time to get the last trade permit (work days)
telecapp	float	%9.0g	Time to get the last Applic. for a commercial electr. connect. (work days)
tsfeprm	float	%9.0g	Time to get the last Work safety permit/P2K3 (work days)
totha	float	%9.0g	Time to get the last other a permit (work days)
tothb	float	%9.0g	Time to get the last other b permit (work days)
tothc	float	%9.0g	Time to get the last other c permit (work days)
tbdprm	float	%9.0g	Compared to 2002. time to obtain building permit
tindprm	float	%9.0g	Compared to 2002. time to obtain industrial permit
tentregc	float	%9.0g	Compared to 2002. time to obtain enterprise registration
ttrdprmc	float	%9.0g	Compared to 2002. time to obtain trade permit
telecappc	float	%9.0g	Compared to 2002. time to obtain Applic. for a commercial electr. connect.
tsfeprmc	float	%9.0g	Compared to 2002. time to obtain Work safety permit/P2K3
tothac	float	%9.0g	Compared to 2002. time to obtain other a permit
tothbc	float	%9.0g	Compared to 2002. time to obtain other b permit
tothcc	float	%9.0g	Compared to 2002. time to obtain other c permit
cstbldprm	float	%9.0g	Cost to obtain last building permit (Rp). after Dec.2004
cstindprm	float	%9.0g	Cost to obtain last industrial permit (Rp). after Dec.2004
cstentreg	float	%9.0g	Cost to obtain last enterprise registration (Rp). after Dec.2004
csttrdprm	float	%9.0g	Cost to obtain last trade permit (Rp). after Dec.2004
cstelecapp	float	%9.0g	Cost to obtain last commercial electr. connect. (Rp). after Dec.2004
cstsfepm	float	%9.0g	Cost to obtain last Work safety permit/P2K3 (Rp). after Dec.2004
cstotha	float	%9.0g	Cost to obtain last other a permit (Rp). after Dec.2004
cstothb	float	%9.0g	Cost to obtain last other b permit (Rp). after Dec.2004
cstothc	float	%9.0g	Cost to obtain last other c permit (Rp). after Dec.2004
cstbldprmc	float	%9.0g	Current cost compared to 2002. building permit. after Dec.2004
cstindprmc	float	%9.0g	Current cost compared to 2002. industrial permit. after Dec.2004
cstentregc	float	%9.0g	Current cost compared to 2002. enterprise registration. after Dec.2004
csttrdprmc	float	%9.0g	Current cost compared to 2002. trade permit. after Dec.2004
cstelecappc	float	%9.0g	Current cost compared to 2002. commercial electr. connect.. after Dec.2004
cstsfepm	float	%9.0g	Current cost compared to 2002. Work safety permit/P2K3. after Dec.2004
cstothac	float	%9.0g	Current cost compared to 2002. other a permit. after Dec.2004
cstothbc	float	%9.0g	Current cost compared to 2002. other b permit. after Dec.2004
cstothcc	float	%9.0g	Current cost compared to 2002. other c permit. after Dec.2004
unbldprm	float	%9.0g	Tot. unoff. fees paid. building permit (Rp). after Dec.2004
unindprm	float	%9.0g	Tot. unoff. fees paid. industrial permit (Rp). after Dec.2004
unentreg	float	%9.0g	Tot. unoff. fees paid. enterprise registration (Rp). after Dec.2004
untrdprm	float	%9.0g	Tot. unoff. fees paid. trade permit (Rp). after Dec.2004
unelecapp	float	%9.0g	Tot. unoff. fees paid. commercial electr. connect. (Rp). after Dec.2004
unsfepm	float	%9.0g	Tot. unoff. fees paid. Work safety permit/P2K3 (Rp). after Dec.2004
unotha	float	%9.0g	Tot. unoff. fees paid. other a permit (Rp). after Dec.2004
unothb	float	%9.0g	Tot. unoff. fees paid. other b permit (Rp). after Dec.2004
unothc	float	%9.0g	Tot. unoff. fees paid. other c permit (Rp). after Dec.2004
unbldprmc	float	%9.0g	Unoff. fees compared to 2002. building permit. after Dec.2004
unindprmc	float	%9.0g	Unoff. fees compared to 2002. industrial permit. after Dec.2004
unentregc	float	%9.0g	Unoff. fees compared to 2002. enterprise registration. after Dec.2004
untrdprmc	float	%9.0g	Unoff. fees compared to 2002. trade permit. after Dec.2004

unelecappc	float	%9.0g	Unoff. fees compared to 2002. commercial electr. connect..after Dec.2004
unseprmc	float	%9.0g	Unoff. fees compared to 2002. Work safety permit/P2K3. after Dec.2004
unothac	float	%9.0g	Unoff. fees compared to 2002. other a permit. after Dec.2004
unqthbc	float	%9.0g	Unoff. fees compared to 2002. other b permit. after Dec.2004
unothcc	float	%9.0g	Unoff. fees compared to 2002. other c permit. after Dec.2004
mgobst_1	str2	%9s	One of the government obstacles is the most important obstacle
mgobst_2	str2	%9s	One of the government obstacles is the second most important obstacle
mgobst_3	str2	%9s	One of the government obstacles is the third most important obstacle
mgobst_4	str2	%9s	One of the government obstacles is the fourth most important obstacle
mgobstrem_1	float	%9.0g	% income change if one of the government obstacles was removed. most important o
mgobstrem_2	float	%9.0g	% income change if one of the government obstacles was removed. second most imp
mgobstrem_3	float	%9.0g	% income change if one of the government obstacles was removed. third most impo
mgobstrem_4	float	%9.0g	% income change if one of the government obstacles was removed. fourth most impo