## EMPLOYMENT AND WAGE DEVELOPMENTS IN KHARKIV AND EASTERN UKRAINE

Prepared for



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February 2001 UI Project 07130-000

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We examined labor market data on employment and average monthly wages by economic sector and industry for Kharkiv and the other four oblasts that cover the eastern region of Ukraine. We traced the developments of the late 1990s in order to pinpoint industries and sectors where positive labor market outcomes can be identified. Two outcomes are of particular interest: employment growth and payment of above-average wages. To the extent these can be found, this may help to target the efforts of USAID to support employment growth, a major objective of the Kharkiv initiative.

Employment decreased substantially in Kharkiv and throughout Eastern Ukraine during the late 1990s. Table 1 helps provide an overview of employment developments in Kharkiv and other four eastern oblasts. The table summarizes employment levels and trends for 23 broad sectors and for 19 detailed industries within the industrial sphere for each oblast. Employment in the five oblasts averaged 5.4 million persons during 1996-1999, accounting for about one third of national employment as recorded in Ukraine's establishment (enterprise) reports.

The employment data summarized in Table 1 are based on the enterprise reporting system that predates Ukrainian independence. Employment and total payroll are reported for the formal sector at large and medium enterprises that traditionally have provided the bulk of employment. These data do not fully capture employment developments in Kharkiv and other areas of Ukraine. Small enterprises, single (own account) entrepreneurs and most individual farmers fall outside the scope of these enterprise reports. Since important employment developments are taking place among the excluded groups, an important part of the dynamics of the labor market is not reflected in these data.

Five sectors (industry, agriculture, transportation, construction and retail-food services) account for about two thirds of all employment covered by this reporting system (percentage shares appear in columns (6) through (10)). In the long run, most enterprises in these sectors would be privately owned and they would be expected to provide a large share if not the majority of new employment opportunities for the labor force.

All five sectors experienced continuous and substantial erosion of employment during the late 1990s. Annual percentage rates of change (columns (11)-(15)) were negative for all five sectors in all five oblasts during 1996-1999. The simple average of these 25 annual percentage changes was -7.6 percent. The smallest (closest to zero) annual change among these 25 was an average decrease of 3.3 percent per year (transportation in Donets) whereas the largest (most negative) was a decrease of 12.4 percent (retail-food services in Lugansk).

Total employment across all sectors in Kharkiv decreased from 1.037 million in 1996 to 874,000 in 1999, a reduction of 163,000, or 15.7 percent. For the five sectors identified above, total employment decreased from 670,000 to 530,000, or about 140,000. These sectors accounted for 86 percent of the total decrease in employment in

Kharkiv. Across these sectors, Kharkiv has a relatively smaller reliance on industrial employment but above-average reliance on agriculture (column (6)).

Four other sectors that traditionally provide services to the population (housing and community services, health, education and government) also account for a sizeable share of total employment. Across the five oblasts, their combined share averaged about 25 percent of employment. Note that employment changes in these sectors were generally small in the late 1990s. The simple average of the 20 annualized rates of change was -0.2 percent and the largest annual rate of decrease was 3.2 percent (education in Lugansk). These sectors were comparatively successful at maintaining employment levels, relative to industry or construction, for example.

For the broad sectors summarized in the top lines of Table 1, there was no large sector with robust employment growth in any of the five oblasts. Kharkiv experienced positive employment growth in just five sectors: forestry, communication, computing and information services, geology-geodesy-meteorology and housing and community services. Combined, however, their average employment was only 65,000 or less than 7 percent of the total employment in Table 1. Also, between 1996 and 1999, the increase in employment for the five sectors combined was from 62,000 to 68,000, or 6,000. For large and medium enterprises at the level of the broad economic sectors, no major sectors saw rapid employment growth that could provide a base for absorbing workers losing jobs in industries experiencing employment reductions.

The bottom lines of Table 1 summarize employment levels and shares for detailed industries. The importance of machinery and metalworking in Kharkiv stands out. Its four-year average of 165,000 accounted for 60.2 percent of all industrial employment in Kharkiv during these years. This industry has experienced large employment losses, averaging 6.0 percent per year during 1996-1999.

Machinery and metalworking is an important employment sector in all five eastern oblasts included in Table 1. The industry has experienced large employment losses across all five oblasts. Annual rates of employment losses (columns (11)-(15)) have ranged from 6.0 percent to 7.7 percent. Two industries that are important in the other four oblasts, fuel and black metal production, are not important in Kharkiv. Note the uniformly small employment changes in black metal production across the five oblasts. Absence of this type of employment in Kharkiv may work to the disadvantage of the oblast since employment levels have held up better than for most detailed industries.

Two industries with high employment concentrations in Kharkiv are the electrical industry and food processing, respectively accounting for 8.5 percent and 11.4 percent of industrial employment during 1996-1999. The electrical industry experienced small employment growth during these years. Food processing had employment reductions, but the annual rate of loss was only about half the all-industry average (column (6)). Both industries have experienced below-average rates of employment losses throughout eastern Ukraine (food processing in DneiproPetrovsk is an exception). Based on the twin considerations of size and recent employment trends, these two industries might merit attention as having good potential for future employment growth at large and medium enterprises.



Of all the industries displayed in Table 1, just three exhibited employment growth in Kharkiv during 1996-1999. However, these three industries (electrical, fuel and grain for food and fodder) had average employment of only 30,000 during 1996-1999. Their employment total of 30,800 in 1999 was only 1400 higher than in 1996. Thus, even selecting only the industries in Kharkiv with employment growth, their total addition to employment was less than 2000.

It is very difficult in the data of Table 1 to find sectors and industries where positive developments in total employment have been taking place among large and medium enterprises. It is known that these enterprise data have coverage problems, especially in the emerging sectors and sectors where small and medium enterprises are common. In aggregate national data, the reductions in enterprise employment have averaged about 750,000 per year since 1991 (a cumulative total of more than 6 million through 1999). While unemployment has increased, particularly since 1995, the increases in both unemployment registered at state employment offices and unemployment as reported in the household labor force survey totaled less than 2 million between 1995 (the first year of the labor force survey) and 1999. Thus, there is an increasing gap between total employment reported in the household labor force survey and employment as reported in the establishment survey and summarized in Table 1. A detailed assessment of this problem could not be undertaken with the data from large and medium enterprises examined here. Table 1 shows that all oblasts are experiencing large scale employment reductions in these establishment data.

Table 2 displays data on average monthly wages for the same oblasts, sectors and industries for the same time period as in Table 1. Overall, monthly wages by oblast grew at rates between 10.6 and 15.6 percent annually during 1996-1999. Wage growth during these years was much slower than during 1995-1996 when annual wage inflation in the five oblasts ranged from 65 to 78 percent. A wider dispersion in wage growth during 1996-1999 took place in the industral sector of these oblasts, from 9.8 percent in DneiproPetrovsk to 19.0 percent in Kharkiv. Both for the aggregate and for the industrial sector, wages grew more rapidly in Kharkiv and Zaporizhka than in the other three oblasts.

Columns (6)-(10) summarize the structure of relative wages across sectors and industries. Five major sectors displayed consistently above-average wages (or wage premiums) across all five oblasts: industry, transportation, construction, finance and government. For each oblast, finance displayed the highest average relative wage, an average premium of 70 percent across the five oblasts and a 100 percent premium in Kharkiv. Unfortunately, relatively few workers realize these high wages since the industry accounted for 0.8-1.1 percent of total employment, 1.0 percent in Kharkiv, (column (6) in Table 1). The industrial sector had the second highest average wage premium across the five oblasts, an average premium of 21.5 percent above the all-sector average. In Kharkiv this premium was only 10.5 percent above the all-sector average. In contrast, the government sector had its highest wage premium in Kharkiv (35.7 percent).

Several sectors are characterized by consistently low average wages. This is observed in agriculture, forestry, fishing, retail-food service and selected consumer services to the population. Additionally, low wages characterize employment in the health, education, culture and arts sectors. Note how the latter sectors also experienced generally low wage growth during 1996-1999. The low rates of wage growth may be linked to the generally modest employment changes (reductions) experienced by these same sectors (columns (11)-(15) in Table 1).

Within the industrial sector, four industries display consistently high wages: electrical, fuel, black metal and process metallurgy. The high wages in these industries observed in Kharkiv (except for black metal) reflect broad patterns across the five oblasts. What is unusual in Kharkiv is the high wages observed in food processing, 27.5 percent above the all-industry average. More typically food processing pays wages in the range from average to roughly ten percent below average.

Several industries pay consistently low wages. This is typical of machinery and metalworking, an industry of particular importance in Kharkiv. Low wages are also observed in woodworking, industry materials, porcelain-pottery and light industry. In most oblasts, these industries pay from half to three fourths of the all-industry average.

From the combined perspective of high wage payments or high wages coupled with favorable employment growth, four sectors seem to provide good job prospects in Kharkiv. These are communication, finance, housing and community service and government. While the first two account for a small number of jobs (recall Table 1) their jobs are high paying on average. The latter two are traditional public sectors where further growth of public sector employment may not be desired as part of economic restructuring. There probably is reason to anticipate growth in private employment in the housing and community service sector. Construction also has high paying employment in Kharkiv, but annual employment losses averaged 10.4 percent during 1996-1999.

Within the industrial sector, the electrical industry pays high wages in Kharkiv and it has experienced modest employment growth. Food processing also pays above-average wages and experienced only modest employment losses during 1996-1999. Creating more jobs in these industries with these levels of pay would seem sensible. Since these two industries rank second and third in industrial sector employment in Kharkiv, employment growth in these specific industries should be encouraged. Positive developments were also present in two other industries (fuel and grain for food and fodder), but the employment base in these industries is quite small.

Table 1
Employment in Kharkiv and Other Oblasts of Eastern Ukraine

	Average Employment - 1996-1999 (thousands)						nent Share	i-1999 (I	Percent)	Annual Employment Change - 1996-1999 (Percent)					
	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zaporizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka
# Major Sectors	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1 Total	944.8	1248.8	1680.8	825.1	676.6	100.0	100	100.0	100.0	100.0	-5.2	-4.7	-5.2	-6.0	-4.8
2 Industrial	278.2	446.9	784.5	339.0	220.5	29.4	35.8	46.7	41.1	32.6	-6.2	-3.4	-6.3	-6.1	-4.3
3 Agriculture	147.4	143.6	125.1	85.2	110.1	15.6	11.5	7.4	10.3	16.3	-5.6	-7.7	-7.8	-9.4	-9.0
4 Forestry	3.6	1.1	1.0	2.0	0.7	0.4	0.1	0.1	0.2	0.1	9.1	-1.1	0.0	7.5	4.4
5 Fishing	0.5	1.1	2.5	0.3	2.1	0.1	0.1	0.1	0.0	0.3	-2.3	27.9	-8.9	-1.0	158.5
6 Transportation	66.3	100.6	115.6	56.1	50.4	7.0	8.1	6.9	6.8	7.5	-9.3	-4.5	-3.3	-4.0	-5.2
7 Communication	15.3	100.0	21.5	00.1	00.1	1.6	0.1	1.3	0.0	7.0	3.8	1.0	-0.2	0	0.2
8 Construction	55.6	83.4	100.2	49.8	36.7	5.9	6.7	6.0	6.0	5.4	-10.4	-12.7	-9.7	-9.2	-9.5
9 Retail, Food Service	46.3	73.7	82.0	44.0	38.9	4.9	5.9	4.9	5.3	5.8	-7.5	-6.7	-10.6	-12.4	-9.2
0 Computing and Info		0.9	1.0	0.7	0.4	0.1	0.1	0.1	0.1	0.0	16.6	-4.3	6.7	36.1	-2.6
Serv.	. 0.5	0.9	1.0	0.7	0.4	0.1	0.1	0.1	0.1	0.1	10.0	-4.5	0.7	30.1	-2.0
1 Operat. with Immov. I	Ectato	0.2			0.0		0.0			0.0		239.4			-10.3
2 Develop of Marke		0.2			0.3	0.0	0.0			0.0	**	36.1			60.6
Function	0.4	0.4			0.5	0.0	0.0			0.0		30.1			00.0
3 Geology, Geod. & Meterol.	k 1.7	1.7	2.9	1.6	0.3	0.2	0.1	0.2	0.2	0.0	33.3	-3.0	-11.4	-14.3	-4.7
4 Select. Cons. Serv.	4.0	6.6	7.1	4.8	3.3	0.4	0.5	0.4	0.6	0.5	-9.7	-8.8	-4.6	-8.6	-8.0
5 Other Materia	_	11.8		7.9	5.2	1.0	0.9		1.0	0.8	-13.6	-7.4		-13.7	-10.8
Production	. 0.0				0.2		0.0			0.0		• • • •			
6 Housing and Comm Services	. 43.5	70.8	66.6	48.5	39.1	4.6	5.7	4.0	5.9	5.8	2.1	-0.9	8.2	-2.6	2.8
7 Health Care, Social Welfare	l 81.2	104.8	127.5	67.1	58.1	8.6	8.4	7.6	8.1	8.6	-0.2	-2.4	-1.1	-2.1	-0.8
8 Education	102.3	118.8	130.5	70.9	63.8	10.8	9.5	7.8	8.6	9.4	-2.5	-2.7	-1.1	-3.2	-3.0
9 Culture	11.0	13.5	16.8	10.2	8.1	1.2	1.1	1.0	1.2	1.2	-6.8	-2.9	0.8	-3.6	-1.8
20 Arts	2.4	2.7	2.4	1.1	1.1	0.3	0.2	0.1	0.1	0.2	-4.9	-11.0	-4.9	-12.1	-12.9
21 Research and Development	33.2	15.9	12.8	6.2	8.8	3.5	1.3	0.8	0.8	1.3	-9.7	-7.1	-7.0	-3.7	-6.0
2 Finance, Ins., Sav Serv.	. 9.2	12.7	14.5	6.6	7.2	1.0	1.0	0.9	8.0	1.1	-2.4	-2.6	-3.3	-9.9	-4.3
23 Government:Central, Local	33.0	37.7	47.8	23.0	21.6	3.5	3.0	2.8	2.8	3.2	-0.2	-1.5	0.5	4.0	2.1
24 Residual			18.7					1.1					-12.9		

Table 1. (cont'd)

	Average Employment - 1996-1999 (thousands)					Employme	)	Annual Employment Change - 1996-1999 (%)							
	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zaporizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka
# Major Sectors	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
51 All Industries	274.6	446.9	781.5	339.0	220.5	100.0	100.0	100.0	100.0	100.0	-5.7	-3.4	-6.1	-6.1	-4.3
52 Electrical	23.4	12.5	29.6	9.2	19.2	8.5	2.8	3.8	2.7	8.7	1.0	1.0	-1.1	3.3	-0.5
53 Fuel	4.2	30.6	296.7	138.1	1.7	1.5	6.9	38.0	40.7	0.8	2.5	-5.8	-7.6	-7.6	0.5
54 Atomic	0.1	4.9				0.0	1.1				-2.3	7.2			
55 Black Metal - Iron	1.5	185.7	165.9	26.9	38.8	0.5	41.6	21.2	7.9	17.6	-1.9	0.8	-1.6	-0.1	0.3
56 Process Metallurgy	0.5	5.4	5.2	0.9	12.7	0.2	1.2	0.7	0.3	5.8	-6.3	8.7	-14.0	5.4	4.7
57 Chemical-Napthal	8.6	21.6	19.1	31.2	4.3	3.1	4.8	2.4	9.2	2.0	-5.8	-7.7	-12.4	-5.9	-5.8
58 Mach. an Metalworking	d 165.3	111.1	129.8	81.3	110.5	60.2	24.9	16.6	24.0	50.1	-6.0	-7.0	-7.7	-7.4	-6.8
59 Woodworking an Paper	d 4.8	4.3	3.8	3.3	1.5	1.8	1.0	0.5	1.0	0.7	-11.5	0.0	-17.0	-8.3	-8.5
60 Industrial Materials	11.2	18.0	27.7	7.0	7.2	4.1	4.0	3.5	2.1	3.3	-8.5	-9.3	-2.2	-11.4	-9.4
61 Porcelain-Pottery	4.5	0.1	8.0	4.8	0.5	1.6	0.0	1.0	1.4	0.2	-15.3	-10.9	-5.4	-4.6	1.3
62 Light Industry	13.9	14.4	18.5	12.9	4.9	5.1	3.2	2.4	3.8	2.2	-11.4	-8.5	-10.5	-6.8	-10.0
63 Food Processing	31.3	26.3	33.6	16.9	15.9	11.4	5.9	4.3	5.0	7.2	-2.8	-6.8	-2.6	-2.0	-3.3
64 Micro					0.2					0.1					-19.6
65 Grain: Food an Fodder	d 2.0	3.3		2.3	1.9	0.7	0.7		0.7	0.9	6.1	4.5		11.2	-1.9
66 Copper		0.7		0.3	0.0		0.2		0.1	0.0		-1.0		-6.6	14.4
67 Instruments	2.4	1.6		0.8	0.6	0.8	0.4		0.2	0.3	-9.2	1.2		-4.5	-11.6
68 Other Processing Industries	g 1.0	5.9		2.8	0.5	0.3	1.3		8.0	0.2	-17.1	-6.2		9.2	53.0
69		0.3		0.2	0.2		0.1		0.1	0.1		11.4		0	5.4
71 Residual			43.7					5.6					-7.7		

Table 2. Average Wages in Kharkiv and Other Oblasts of Eastern Ukraine

	Average Monthly Wages-1996-1999						ve Mont	hly Wag	es-1996	-1999	Ave	Average Annual Wage Growth - 1996-1999				
	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	
# Major Sectors	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
1 Total	154.9	183.8	188.1	157.3	176.9	1.000	1.000	1.000	1.000	1.000	15.0	10.6	12.9	13.1	15.6	
2 Industrial	171.2	238.2	227.0	191.2	221.6	1.105	1.296	1.207	1.215	1.253	19.0	9.9	14.3	14.1	18.4	
3 Agriculture	109.3	108.8	98.0	98.4	106.2	0.705	0.592	0.521	0.625	0.601	17.8	14.6	25.1	23.0	24.7	
4 Forestry	122.9	114.3	96.5	107.1	101.7	0.793	0.622	0.513	0.680	0.575	10.6	4.5	4.0	12.3	1.1	
5 Fishing	113.0	101.1	91.7	94.6	100.2	0.730	0.550	0.488	0.601	0.566	9.5	-3.1	28.1	-2.4	4.7	
6 Transportation	173.5	193.1	194.2	173.4	197.8	1.120	1.051	1.032	1.102	1.118	12.5	12.9	10.5	14.3	15.6	
7 Communication	197.8		224.7			1.277		1.194			17.3		22.0			
8 Construction	191.5	204.4	192.9	180.3	220.1	1.236	1.112	1.025	1.146	1.244	18.2	6.6	7.2	6.2	8.9	
9 Retail, Food Service	124.1	136.5	127.3	111.9	154.5	0.801	0.742	0.677	0.711	0.873	27.0	17.6	27.1	19.8	19.2	
10 Computing and Info. Serv.	165.1	175.9	189.8	144.6	218.0	1.066	0.957	1.009	0.919	1.232	39.8	28.7	11.9	22.3	28.9	
11 Operat. with Immov. E		184.9			204.2		1.006			1.154		45.0			14.9	
12 Develop of Market Function	164.4	169.0			178.2	1.061	0.919			1.008	33.4	40.5			39.9	
13 Geology, Geod.& Meterol.	192.7	142.3	139.2	97.0	134.8	1.244	0.774	0.740	0.616	0.762	1.7	18.0	7.4	14.6	6.9	
14 Select. Cons. Serv. to Pop.	61.4	81.1	81.9	61.3	77.6	0.396	0.441	0.435	0.390	0.439	24.6	39.0	15.4	23.0	22.5	
15 Other Material Production	163.8	201.7		148.4	206.5	1.057	1.097		0.943	1.167	50.0	38.2		25.1	39.0	
16 Housing and Comm. Services	173.7	175.5	177.7	140.1	183.4	1.121	0.955	0.944	0.891	1.037	15.4	10.9	6.2	12.3	14.0	
17 Health Care, Social Welfare	121.3	128.3	131.7	114.6	141.8	0.783	0.698	0.700	0.729	0.802	1.5	5.1	3.9	4.6	2.4	
18 Education	142.9	133.6	138.3	122.5	137.1	0.922	0.727	0.735	0.779	0.775	6.5	5.4	7.1	7.0	6.2	
19 Culture	102.3	108.5	104.2	96.2	104.7	0.660	0.590	0.554	0.611	0.592	1.2	-0.6	3.4	10.1	4.2	
20 Arts	131.3	102.3	134.7	89.7	99.9	0.848	0.557	0.716	0.570	0.565	4.1	12.8	14.9	14.2	21.2	
21 Research and Dev.	182.1	187.7	167.7	136.8	184.5	1.175	1.021	0.892	0.869	1.043	18.2	16.7	12.0	14.4	24.7	
22 Finance, Ins., Sav. Serv.	311.2	276.5	323.4	248.1	299.7	2.009	1.504	1.719	1.577	1.694	15.8	18.3	9.0	11.0	13.0	
23 Government: Central, Local	210.2	194.9	195.7	186.4	203.7	1.357	1.060	1.040	1.185	1.151	13.5	10.7	16.4	11.3	12.3	
24 Residual			150.1					0.798					43.2			

Average Monthly Wages-1996-1999						Relative Mo	Average Annual Wage Growth- 1996-1999								
	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka	Kharkiv	Dneipro- Petrovsk	Donets	Lugansk	Zapo rizhka
Major Sectors	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
51 All Industries 52 Electrical 53 Fuel 54 Atomic 55 Black Metal - Iron 56 Process Metallurgy 57 Chemical-Napthal 58 Mach. and Metalworking 59 Woodworking and Paper 60 Industrial Materials 61 Porcelain-Pottery 62 Light Industry 63 Food Processing 64 Micro 65 Grain: Food and	171.4 285.6 464.1 370.9 164.5 360.5 219.6 144.3 121.1 156.2 129.7 92.0 218.5 209.9 283.6	238.2 334.5 359.3 209.9 287.5 302.8 223.7 155.6 118.3 171.0 76.9 90.3 224.4	227.3 281.9 262.7 259.3 158.9 206.0 163.9 103.8 152.3 135.8 59.4 232.5	191.2 307.4 245.8 222.0 544.1 155.5 118.5 153.2 166.4 77.5 170.4	221.6 376.8 250.2 375.2 311.8 180.9 147.2 89.1 142.6 264.7 88.4 202.6 184.1 166.4	1.000 1.666 2.707 2.163 0.959 2.103 1.281 0.842 0.706 0.911 0.756 0.537 1.275 1.140 1.654	1.000 1.404 1.509 0.881 1.207 1.271 0.939 0.653 0.497 0.718 0.323 0.379 0.942	1.000 1.240 1.156 1.141 0.699 0.906 0.721 0.457 0.670 0.597 0.261 1.023	1.000 1.608 1.285 1.161 2.845 0.813 0.620 0.801 0.801 0.870 0.405 0.891	1.000 1.700 1.129 1.693 1.407 0.816 0.664 0.402 0.644 1.195 0.399 0.914 0.831 0.751	18.9 11.6 17.1 72.9 7.2 51.6 19.1 18.8 13.0 25.5 32.5 10.7 16.4	9.8 3.8 6.5 33.0 7.5 3.4 12.9 10.7 2.9 13.2 30.0 17.3 9.8	14.2 4.0 14.3 12.9 9.4 16.1 18.9 14.0 12.6 10.1 8.3 12.2	14.1 12.7 14.7 11.6 51.8 15.2 11.1 29.3 29.3 14.7 17.9 7.6	18.4 9.7 -1.8 18.4 16.9 7.2 21.5 2.9 9.7 29.9 28.6 4.2 3.3 -8.8
Fodder 66 Copper 67 Instruments 68 Other Processing Inds 69 71 Residual	175.1 169.2	257.6 225.5 207.4 354.9	174.1	323.9 162.1 168.1 228.7	312.8 191.6 90.4 310.4	1.021 0.987	1.081 0.947 0.871 1.490	0.766	1.694 0.848 0.879 1.196	1.412 0.865 0.408 1.401	8.5 24.8	14.6 3.7 7.1 8.0	13.1	8.8 0.5 5.4 21.1	24.9 13.9 0.7 29.5