Enterprise Surveys
Enterprise Note Series

Financial Crisis

How Firms in Eastern and Central Europe Fared through the Global Financial Crisis: Evidence from 2008–2010

Paulo Correa, Mariana Iootty, Rita Ramalho, Jorge Rodríguez-Meza, Judy Yang

The latest data of the Financial Crisis Survey show continued negative sales performance, on average, but the general rate of decline seems to have slowed. Permanent employment remained somewhat depressed, with no country having regained its pre-crisis employment level. Utilization of installed capacity showed mixed trends across the region, with Hungary and Romania surpassing pre-crisis levels. Four principal results emerged from the new data. Firstly, Turkey stands out as having coped better than the other surveyed countries, while Bulgaria seemed to be the most affected, when overall sales, employment, and capacity utilization are taken into account. Secondly, small and medium size firms are struggling to cope with the economic downturn, as evidenced by their lower performance in sales and capacity utilization. Thirdly, firms are still facing tight financing conditions; firms are replacing bank financing with internal financing and, especially in Latvia and Lithuania, fewer firms are applying for loans and receiving smaller amounts than requested. On a positive note, firms are less likely to be overdue in their payment obligations. Finally, with regard to firms' technology decisions, a significant proportion of firms continued to reduce their R&D efforts in Bulgaria, Latvia, and Lithuania. However, when considering firm's expectations of R&D, the last survey showed surprising optimism, as in all countries, except Latvia, the proportion of firms expecting to increase their R&D efforts was higher than that of firms planning to reduce R&D.

Introduction

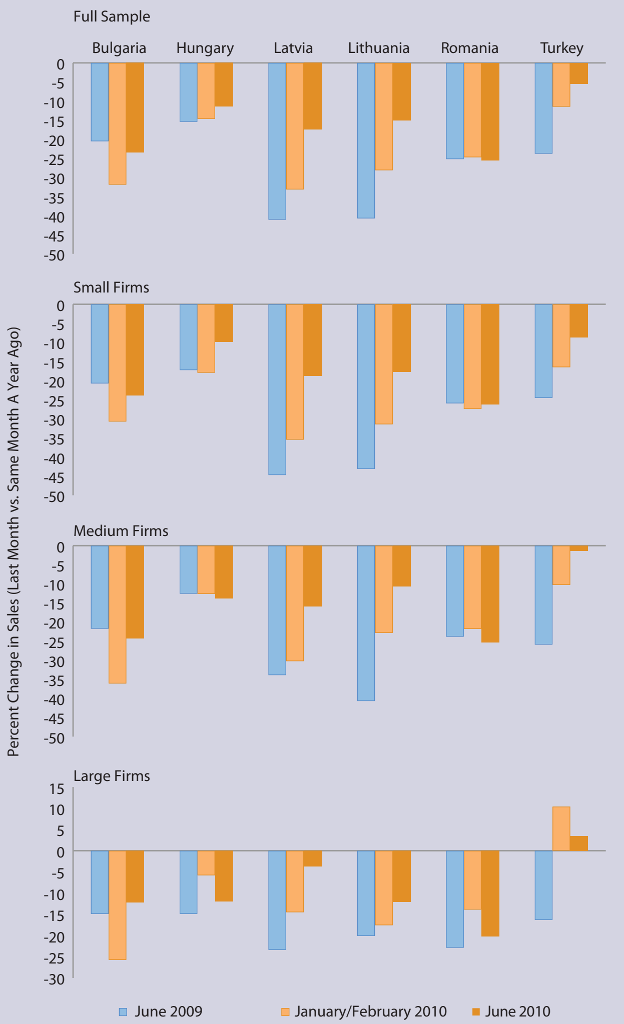
The World Bank conducted the third round of its Enterprise Financial Crisis Survey in six countries of the Europe and Central Asia region in June 2010, covering 1,393 firms in both the manufacturing and service sectors (Table 1). The first two rounds took place in June/July 2009 and February/March 2010 in Turkey, Romania, Hungary, Latvia, Lithuania, and Bulgaria.[1] The survey's objective is to assess the effects of the global financial crisis on key elements of each country's private economy, such as sales, employment, finances and R&D. Participation in the survey was voluntary and each round targeted a subsample of the 2,819 firms interviewed in the cross-regional Enterprise Survey of 2008. The data from that survey provided a baseline for later comparisons because they referred mostly to fiscal year 2007, the pre-crisis scenario. In all countries, the sampling represented the private nonagricultural formal economy, involving small, medium-size and large firms. In Turkey the 2009 survey round covered only manufacturing firms, though the second and third rounds did cover the same range of the private sector as in the remaining countries.

2010
Enterprise Note No. 20
World Bank Group

Table 1	Round three sample description						
		Sample composition by size (%)			Sample composition by industry (%)		
	Total	Small (5-20)	Medium (20-99)	Large(≥100)	Manufacturing	Retail	Other services
Bulgaria	152	47	35	18	35	31	34
Hungary	151	35	30	34	40	22	38
Latvia	206	36	31	33	34	34	32
Lithuania	217	41	32	28	37	24	39
Romania	303	29	38	33	37	27	37
Turkey	364	33	40	27	48	22	30

Note: Percentages may not add up to 100 due to rounding.

Figure 1 How sales in the last month compared to the same month a year ago



Source: Financial Crisis Survey, Enterprise Surveys.
Note: Data for Turkey in June 2009 refer only to manufacturing sector.

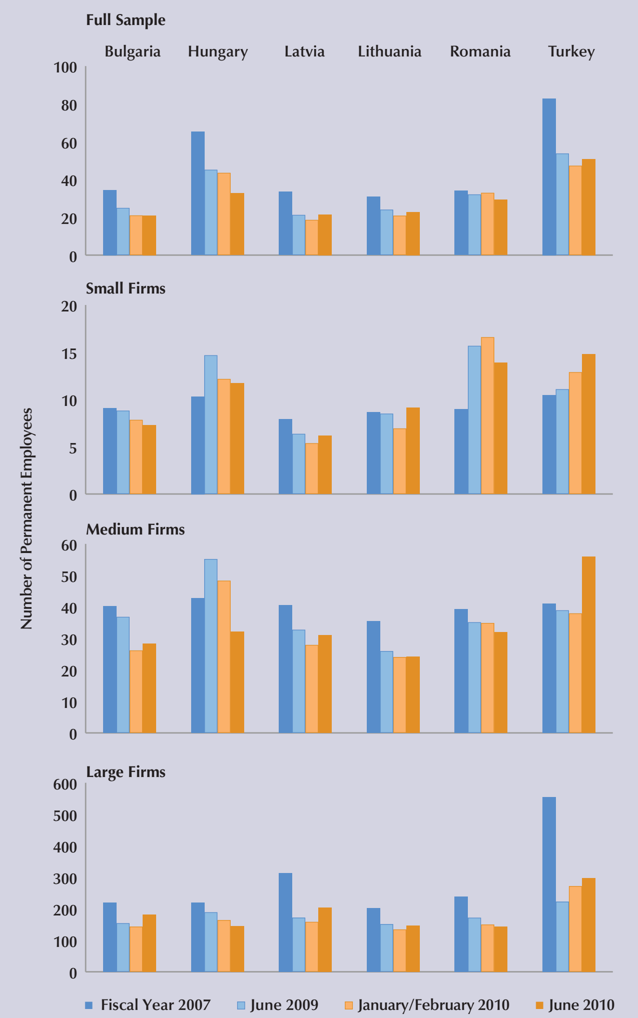
Turkey stands out among the six countries as having coped better with the crisis

The generally negative sales performance of firms continued, on average, through mid-2010 in all six surveyed countries. However, with the exception of Romania, the rate of sales decline seemed to be decelerating (Figure 1). Turkey's rate of sales growth, though still negative on average, appear to have steadily improved (though it must be noted that the first-wave figures, of June 2009, are not a true comparative since they represent only manufacturing).[2] In the other surveyed countries, sales declines measured in June 2010 showed a general improvement on those of twelve months earlier, though Bulgaria and Romania showed no definite trend. In Bulgaria, for instance, the sales decline for June 2010 is lower than that of the early-2010 round but higher than in mid-2009. When comparing by firm size, Turkish large firms were the only cohort to show positive sales growth in February 2010.

Though sales declines slowed in most countries, the state of permanent employment in the private sector continued to deteriorate. No country had returned to its pre-crisis employment level. The only exceptions were small and medium-size firms in Turkey, and small firms in Hungary, Lithuania and Romania that had raised employment levels to above pre-crisis values (Figure 2).Among the other five countries, the downward adjustment in employment was particularly apparent in Hungary and Bulgaria, where the average number of fulltime employees decreased in each successive survey round. Latvia was the only country to regain its June 2009 standing.

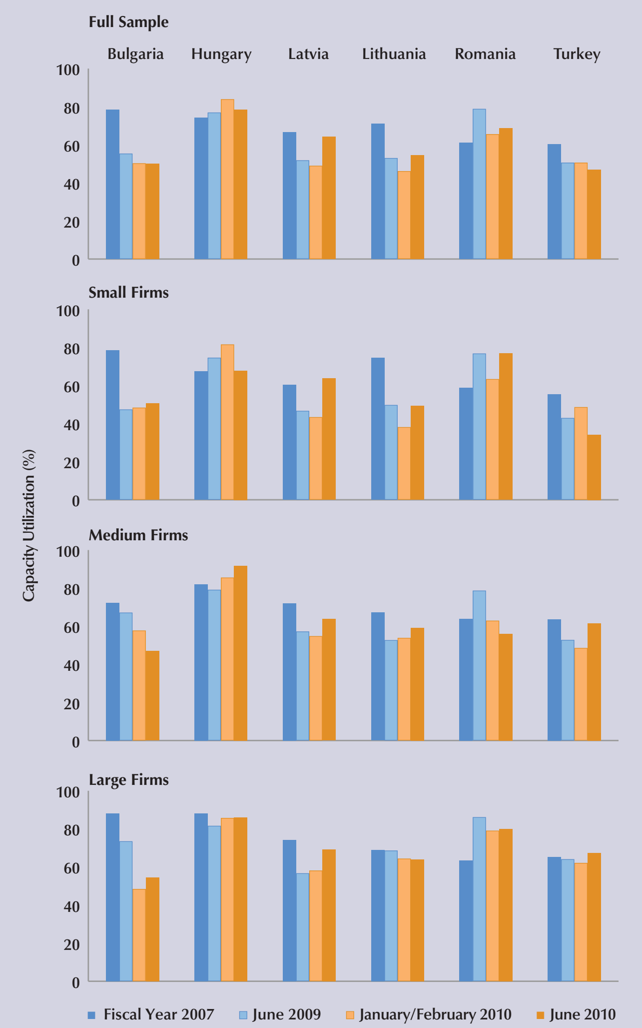
In respect to the measurement of installed capacity, the countries surveyed showed mixed outcomes in mid-2010 (Figure 3). It must be noted, however, that the generally weak capacity use encountered at the start of 2010 (only Hungary had improved when compared to the previous survey) could be attributed largely to the seasonal fall in economic activity at that time.

Figure 2 Average permanent employment



Source: Financial Crisis Survey, Enterprise Surveys.
Note: Data for Turkey in June 2009 refer only to manufacturing sector.

Figure 3 Average capacity utilization in manufacturing



Source: Financial Crisis Survey, Enterprise Surveys.
Note: For Figures 1-3, A firm's size categorization is fixed across survey rounds based on their size in Fiscal Year 2007.

In Turkey, though the use of installed capacity continued to decline, some heterogeneity appeared across sizes: small firms fell below their early-2010 levels but medium-size and large firms reported positive figures; in fact large firms' average use of installed capacity surpassed its pre-crisis level in mid-2010. In Latvia and Lithuania, capacity use rose above June 2009 levels but were still below their pre-crisis positions. In the other countries, Hungary and Romania rose above their pre-crisis capacity use in June 2010, while Bulgaria continued to decline.

Overall, among the surveyed countries, Turkey seems to present a consistently positive evolution for large firms. Even though the country's broad picture continued to show a decline in sales, employment and capacity utilization, there seemed to be a robust operational recovery of large firms, with increasing sales, employment – though the latter was still below the 2007 level – and a capacity utilization that surpassed the pre-crisis level. On the other hand, Bulgaria seemed to be the most affected; the sales decline was less than in the previous round but higher than in June 2009, especially for small and medium-size firms (Figure 1), and both the average full time employment and use of installed capacity have decreased in each successive survey round since 2007.

Small and medium-size firms were more affected by the downturn than large firms

Small and medium-size firms have struggled more than large firms to cope with the economic downturn. This is evident when looking at the evolution of sales and capacity utilization. However, the finance and employment data indicate positive news for small and medium-size firms.

In most countries, small and medium-size firms seemed to face bigger drops in sales than large firms – a phenomenon noted also in the earlier survey rounds (Figure 1). In all countries, except Hungary, large firms are making better use of their installed capacity than small or medium-size firms. Furthermore, in all countries capacity utilization for large firms increase or remained constant from January 2010 to June 2010 (Figure 3). The same cannot be said for small and medium-size firms although there was a general trend to increase capacity utilization from January to June (maybe due to seasonality as explained above).

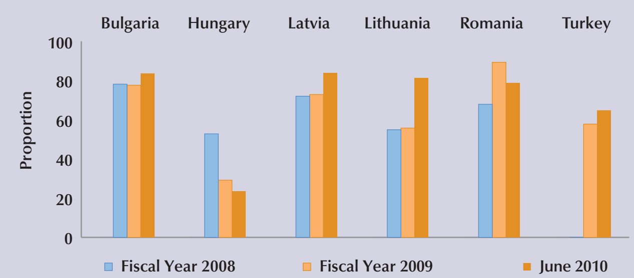
Regarding finance there is no clear pattern by firm size, and the patterns vary from country to country. In Hungary, Latvia and Turkey, the decrease in overdue obligations was accompanied by a reduction in the proportion of firms seeking debt restructuring without going to court. In Hungary and Latvia, this decrease occurred among all firm sizes. Meanwhile, in Bulgaria Lithuania and Romania the average proportion of firms restructuring liabilities increased. In Bulgaria, these were mainly small firms, in Lithuania medium-size and small, and in Romania, small and large.

Small and medium-size firms are experiencing lower reductions in employment than large firms, in both absolute and relative terms. As already said, in Turkey, small and medium-size firms have performed relatively well, as they have raised employment levels to above pre-crisis values, while large firms are still employing fewer staff than before the crisis, though their numbers – like those of Lithuania, Latvia, and Bulgaria – rose through the first half of 2010. In Hungary and Romania large firms reduced their permanent employee numbers in each successive survey round (Figure 2).

Five of the six countries increased the financing of working capital with internal funds and reduced financing from banks

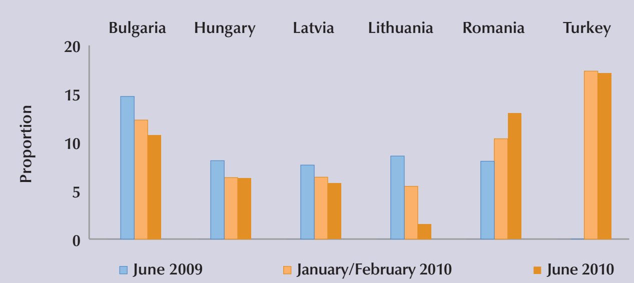
In all countries, except Hungary, firms increased the use of their own resources to finance working capital between June 2009 and June 2010. This was notable across retail sectors in all countries but Romania, and all firm sizes in Bulgaria, Latvia, Lithuania, Romania and Turkey. In all countries, except Romania, firms decreased the use of banks over the same period. This was notable across all sectors except in Romania and Other Services sector in Turkey (Figures 4 and 5).

Figure 4 Proportion of working capital financed from internal funds



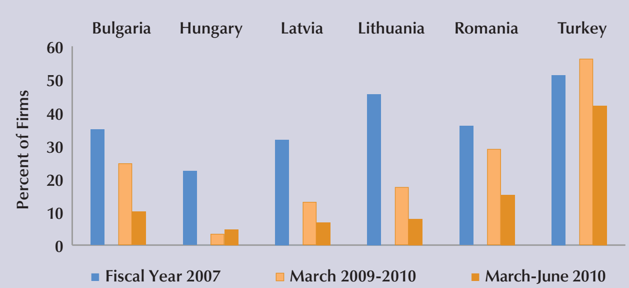
Source: Financial Crisis Survey, Enterprise Surveys.

Figure 5 Proportion of working capital financed from banks



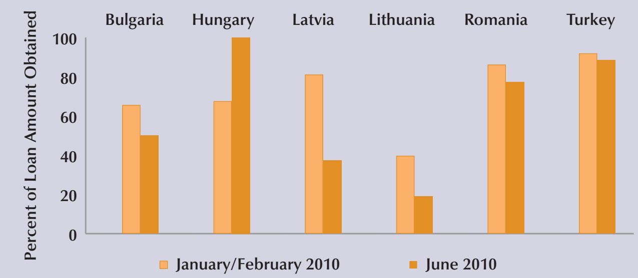
Source: Financial Crisis Survey, Enterprise Surveys.
Note: Data for Turkey June 2009 reflect only manufacturing firms.

Figure 6 Percentage of firms applying for loans



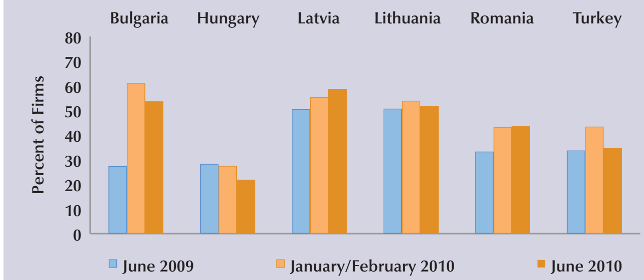
Source: Financial Crisis Survey, Enterprise Surveys.
Note: In the last survey period, the data reflect only the previous three months, versus the previous twelve months in other survey periods.

Figure 7 Percentage of loans obtained as a percentage of amount requested



Source: Financial Crisis Survey, Enterprise Surveys.

Figure 8 Percentage of firms delaying payments to tax authorities



Source: Financial Crisis Survey, Enterprise Surveys.

The increasing use of internal funds as a cash buffer to finance working capital is possibly related to greater constraint to access to credit. In this regard, two points must be highlighted. The amount of internal financing used in the first quarter of 2010 was substantial, accounting for more than 60 percent of all working capital financing in all countries, except Hungary. Second with exception to Romania, the percent of financing from banks declined in every successive round for the other five countries.

Except for Turkey, the propensity of a small or medium-size firm to apply for credit was below the European Union average of 29 percent.

Fewer firms apply for loans and are receiving less than requested

Firstly, fewer firms applied for loans in the most recent period surveyed. From March 2009-2010, the percentage of firms applying for loans fell in all countries except Hungary. The phenomenon was apparent in all firm sizes. Except for Hungary, the percentage of firms applying for loans currently stands at its lowest since this survey series began. Hungary's slight rise in applications, however – to just 5 percent – still left the country trailing the others in proportion of credit applications (Figure 6). It is also noteworthy that the region's demand for credit remains weak by European standards: in all surveyed countries, post-2008, except for Turkey, the propensity of a small or medium-size firm to apply for credit was below the European Union average of 29 percent .

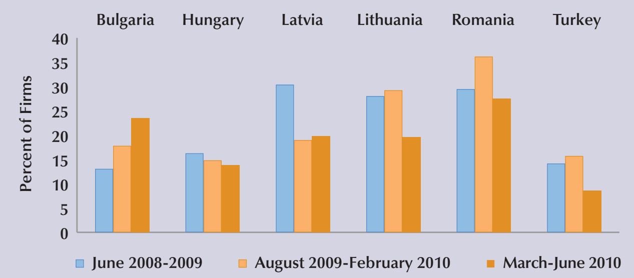
Secondly, firms who applied for credit were granted smaller amounts (Figure 7). Data show that all the countries surveyed, except Hungary, registered a drop in the average percentage of loan obtained as a proportion of the amount requested in June 2010. This was especially true in Latvia and Lithuania where the average percentage of granted amount was smaller than 50 percent. Overall, the decline occurred among all firm sizes, except in Turkey, where the average share increased for large firms.

Late Payments to tax authorities are still common but fewer firms are overdue on financial obligations

Late payments are a constant problem in transitional and developing countries, and the economic downturn was expected to exacerbate this tendency in the region, with cash flows dragged down and possible consequences for tax and other current expenses. The June 2010 survey round tended to confirm this trend, as only Hungary reduced the number of firms delaying payments from the mid-2009 level (Figure 8). Latvia maintained a steady trend upward through the twelve months. Bulgaria and Lithuania, while reducing their payment delays since January 2010, were still tardier than twelve months earlier. Romania, having raised its payment delays through the half-year, remained at the same level as six months earlier. Only Hungary reduced the average percentage of late-paying firms throughout all three rounds. Turkey's percentage, while lower than in January 2010, was almost the same as that of June 2009.

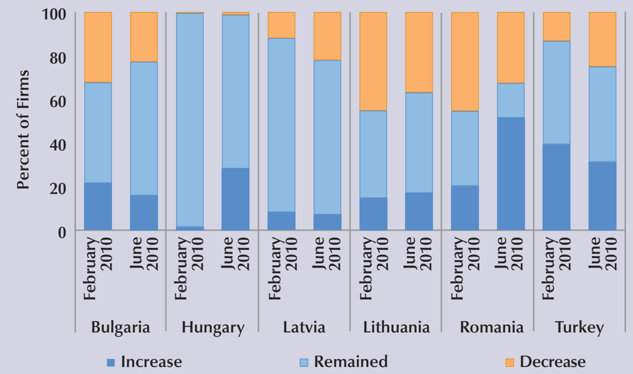
On a more encouraging note, the percentage of firms overdue on financial obligations dropped between June 2008 and June 2010 in all countries except Bulgaria (Figure 9). Turkey which fared the best in sales and employment during the financial crisis also had the

Figure 9 Percentage of firms overdue on financial obligations



Source: Financial Crisis Survey, Enterprise Surveys.

Figure 10 R&D spending



Source: Financial Crisis Survey, Enterprise Surveys.

lowest percentage of firms overdue in the most recent period. Firms in Turkey were also most likely to apply for state aid during all three financial crisis survey periods – at a rate almost twice that of any other country. A lack of the use, or availability, of financial instruments may hinder firms' management of debt. Romania, which had the lowest percentage of firms restructuring liabilities between June 2008 and February 2010, also had a higher percentage of firms overdue on financial obligations in the same period

Some firms continued to reduce their research and development (R&D) spending

When examining the real impacts of the crisis, another important variable to analyze is technology spending. The survey showed mixed results. First, data from the June 2010 survey suggest that the lingering uncertainties in credit markets seemed to have shaken some firms' commitments to R&D in Latvia, Lithuania, and Bulgaria. In these countries, among the firms that were performing R&D before the crisis, the proportion of firms that reduced their R&D spending in the first quarter of 2010 (when compared to the same period in 2009) was higher than the proportion of firms expanding R&D (Figure 10). This confirmed what happened in the February 2010 survey, when data showed that the probability of decreasing R&D in the 2009 period (compared to 2008) was higher than the probability of increasing R&D efforts.

In Bulgaria, Latvia, and Lithuania, a significant proportion of firms continued to reduce their R&D efforts, which is consistent with the pro-cyclicality of R&D expenditures.

On the other hand, the last survey showed some positive results. In Hungary, among the firms that were performing R&D before the crisis, the proportion of those declaring to have increased R&D spending continued to be larger than the proportion of firms reducing R&D. In Turkey, though the probability of having decreased R&D efforts has increased between the two surveys, the proportion of firms with increasing R&D efforts continued to be higher than the proportion of firms with decreasing R&D efforts. In Romania, the last survey showed an increase in the proportion of firms expanding their R&D efforts, therefore reversing the trend for the previous survey round, when the probability of increasing R&D used to be smaller than the probability of reducing R&D efforts.

Overall, the fact that some firms managed to expand their R&D activities in Turkey, Hungary, and more recently in Romania, is somewhat unexpected in context of the economic downturn, and it could suggest that firms in these countries are following a strategy of persistent R&D efforts. For the other surveyed countries, the picture of current R&D spending was not that positive, which is consistent with the pro-cyclicality of R&D expenditures.

However, when considering the firms' expectations of R&D spending, the optimism seemed surprisingly strong among those that were performing R&D before the crisis.

Data from June 2010 show that in most countries the proportion of firms planning to increase their R&D efforts is higher than the proportion of firms planning to reduce it. This was indicated in not only Turkey, Hungary and Romania, but also Bulgaria and Lithuania. In Bulgaria, for instance, 15.8 percent of firms said they planned to increase R&D spending, compared to just 7.8 percent of firms that said they would reduce it. In Lithuania the proportion of firms increasing R&D efforts was 20.6 percent, compared to 11.8 percent planning to decrease it. If these positive expectations are confirmed, it would be an encouraging trend, as R&D and innovation tend to be important for expanding GDP and exports in post-crisis periods.

Conclusion

On average, little happened to change the perception from the previous survey round: that the sustainability of the recovery remains uncertain. Though sales declines continued to lose pace – with a wider range of large Turkish firms showing positive sales – the employment situation in all surveyed countries still had not returned to pre-crisis levels. Enterprise finance had yet to improve. While in all countries, except Bulgaria, the proportion of overdue firms had decreased, a larger number of firms had delayed payments to tax authorities from the mid 2009 level (except in Hungary). Besides, the fact that fewer firms had applied for loans, and those who did were granted smaller amounts, especially in Latvia and Lithuania, might point to a tightening access to credit. On the positive side, in in most countries the proportion of firms planning to increase their R&D efforts is higher than the proportion of firms planning to reduce it.

Notes

1. In round two, 233 firms in Kazakhstan were surveyed.
2. It is important to note that the decline of sales over the three survey periods, June 2008 to June 2010, is smaller in Hungary than in Turkey.
3. In the last survey period, the data reflect only the previous three months, versus the previous twelve months in other survey periods.
4. Measured in December 2009 from "European Central Bank Survey on the Access to Finance of SMEs in the Euro Area."

THE WORLD BANK

IFC International Finance Corporation
World Bank Group