

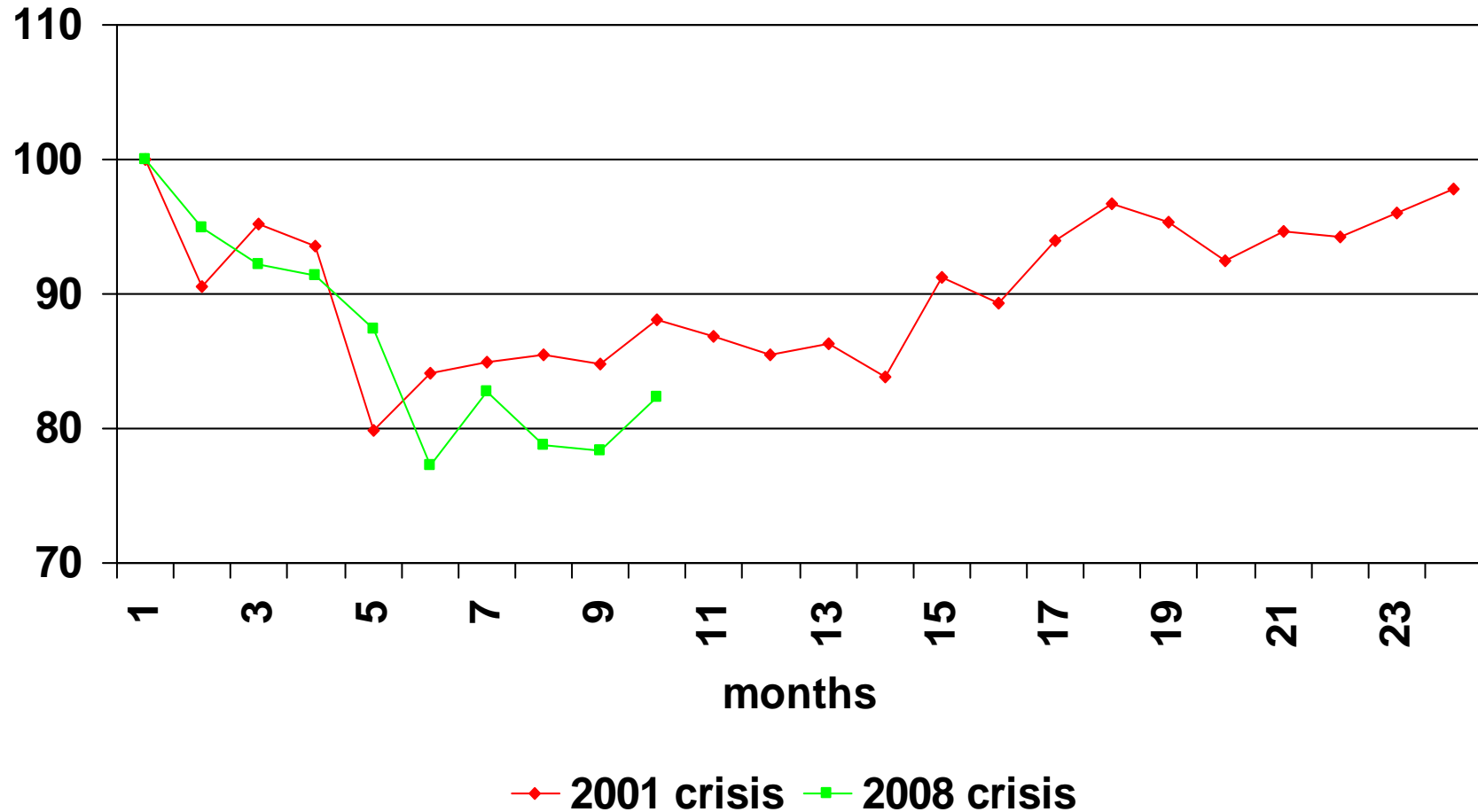
# Adjustment of Turkey's Economy during Two Crises: Gendered Implications in Labor Markets

Yelda Yücel

29 June - 10 July 2009

Levy Economics Institute of  
Bard College

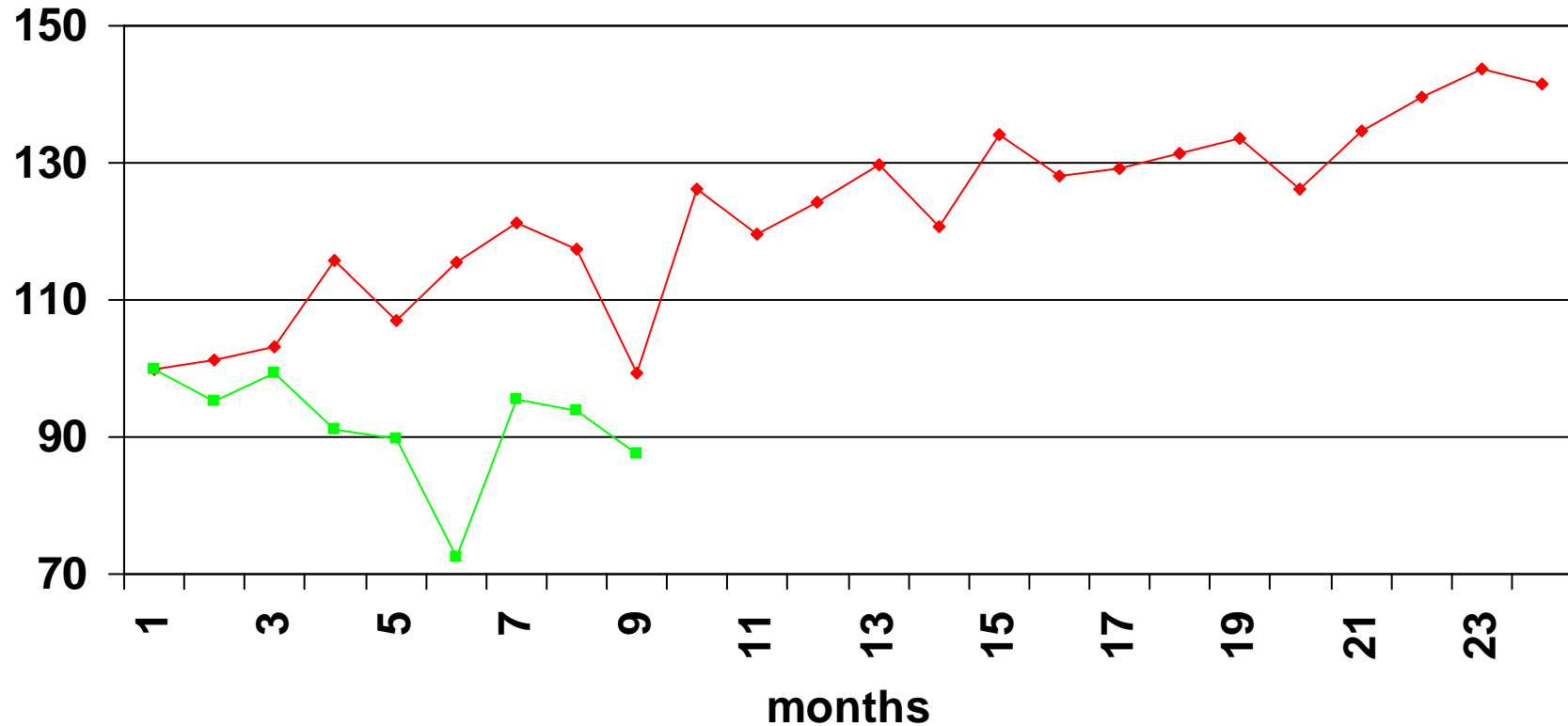
# Industrial Output (index, SA\*)



\* For 2001 index, November 2000 = 100; for 2008 index, July 2008 = 100

Source : Turkstat

# Export Volume (index, SA\*)

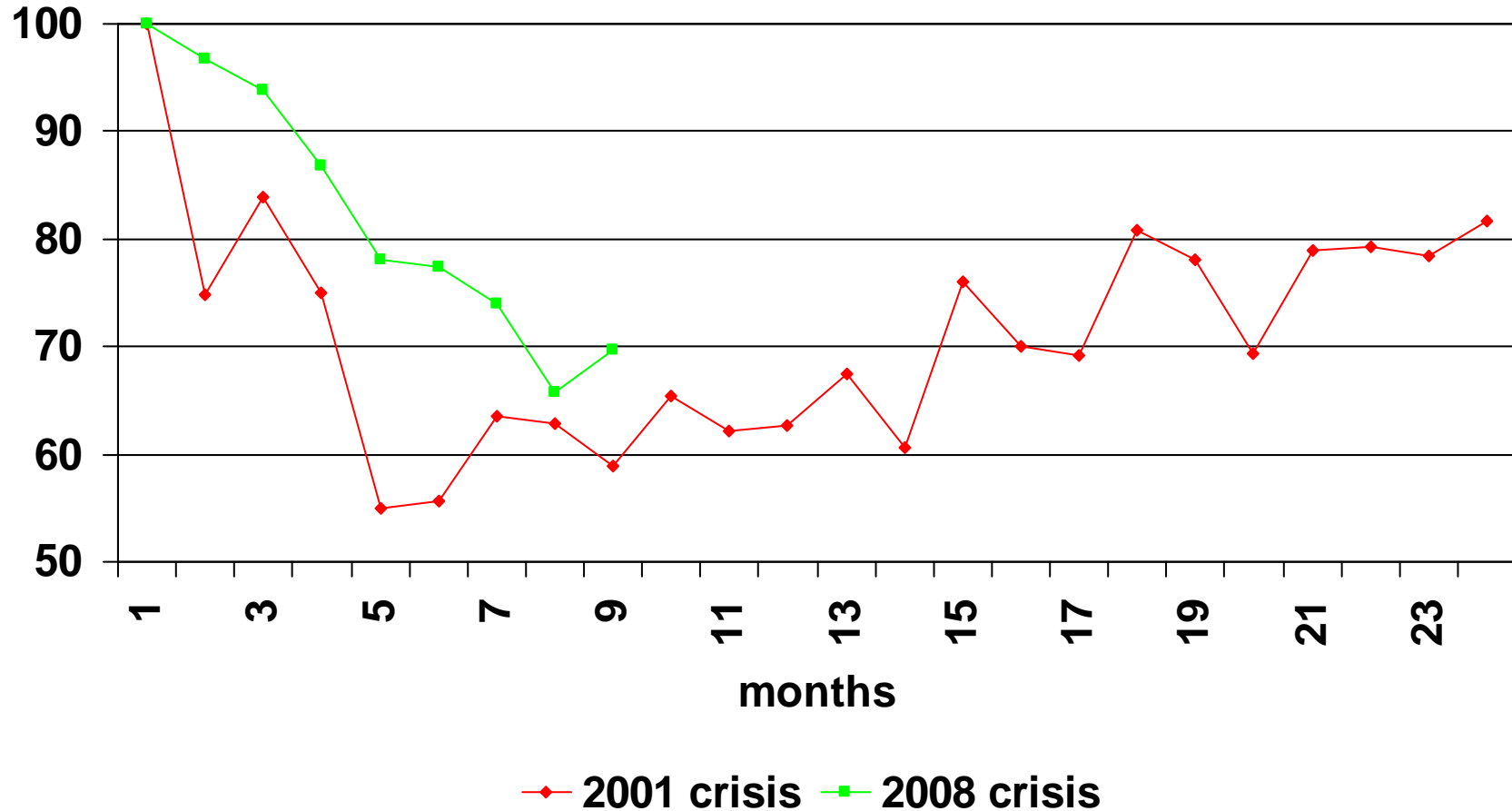


—◆— 2001 crisis —■— 2008 crisis

\* For 2001 index, November 2000 = 100; for 2008 index, July 2008 = 100

Source : Turkstat

# Import Volume (index, SA\*)



\* For 2001 index, November 2000 = 100; for 2008 index, July 2008 = 100

Source : Turkstat

# Comparing Industrial Output in Two Episodes – 2001 crisis

<i>2001 crisis</i>				
<b>Manufacturing industry</b>	<i>weight</i>	<i>beginning and end of contraction</i>	<i>months of contraction</i>	<i>average contraction*</i>
Food products and beverages	9.9%	February 2001-February 2002	13	-5.5%
Textiles	11.0%	February - November 2001	10	-6.3%
Wearing apparel	6.7%	May - December 2001	8	-7.3%
Paper and paper products	1.4%	February - June 2001	5	-14.4%
Printing and publishing	1.6%	February 2001-September 2002	20	-20.2%
Coke, petroleum products and nuclear fuel	1.8%			
Chemicals and chemical products	7.6%	December 2000-February 2002	15	-11.1%
Rubber and plastic products	3.9%	June 2001-February 2002	9	-9.6%
Other non-metallic minerals	6.1%	March 2001-February 2002	12	-19.5%
Manufacture of basic metals	7.8%	March 2001-February 2002	12	-8.2%
Manufacture of fabricated metal prod(exc machinery)	3.3%	February 2001-February 2002	13	-15.5%
Manufacture of machinery and equipment	5.6%	February 2001-February 2002	13	-19.8%
Electrical machinery and apparatus	2.3%	December 2000-January 2002	14	-14.8%
Communication and apparatus	1.5%	March - December 2001	10	-13.7%
Motor vehicles and trailers	8.5%	February 2001-February 2002	13	-43.6%
Furniture	2.7%	March 2001-September 2003	31	-10.8%
Electricity, gas and steam	10.5%			
<b>Total</b>	92.3%			
<b>Average**</b>			11.9	
<b>Median**</b>			12.5	

\* average of growth rates in the period

\*\* excluding outliers

Source : Turkstat

# Comparing Industrial Output in Two Episodes – 2008 crisis

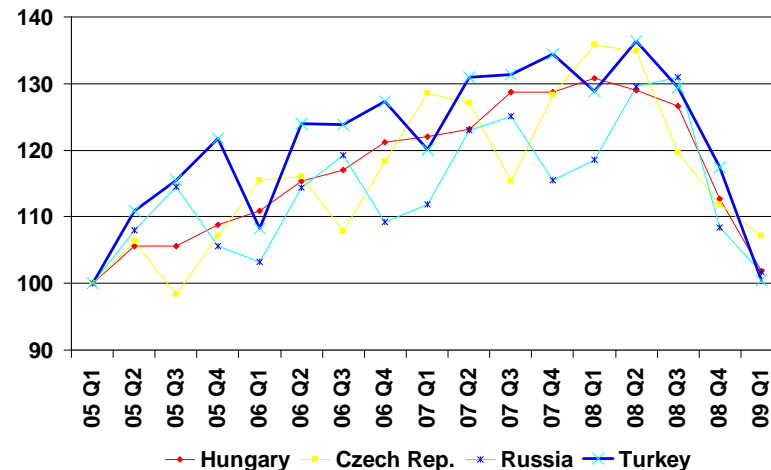
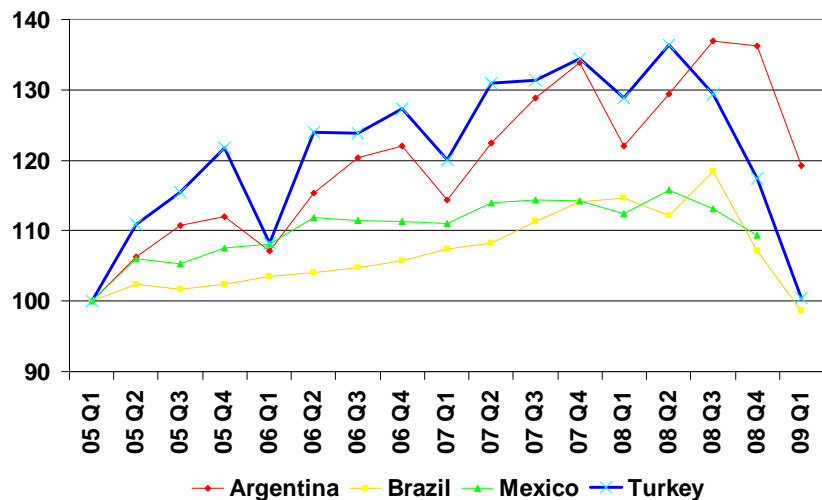
Manufacturing industry	weight	2008 crisis		
		beginning of contraction	months of contraction so far	average contraction*
Food products and beverages	9.9%	February 2009	3	-3.2%
Textiles	11.0%	December 2007	17	-13.8%
Wearing apparel	6.7%	March 2008	14	-15.2%
Paper and paper products	1.4%	August 2008	9	-5.6%
Printing and publishing	1.6%	October 2008	7	-7.5%
Coke, petroleum products and nuclear fuel	1.8%	October 2008	7	-27.2%
Chemicals and chemical products	7.6%	September 2008	8	-11.9%
Rubber and plastic products	3.9%	June 2008	11	-14.2%
Other non-metallic minerals	6.1%	August 2008	9	-14.3%
Manufacture of basic metals	7.8%	August 2008	9	-19.5%
Manufacture of fabricated metal prod(exc machinery)	3.3%	May 2008	12	-18.9%
Manufacture of machinery and equipment	5.6%	May 2008	12	-12.8%
Electrical machinery and apparatus	2.3%	August 2008	9	-18.9%
Communication and apparatus	1.5%	April 2006	37	-24.0%
Motor vehicles and trailers	8.5%	August 2008	9	-38.5%
Furniture	2.7%	November 2008	6	-15.9%
Electricity, gas and steam	10.5%	October 2008	7	-4.8%
<b>Total</b>	<b>92.3%</b>			
<b>Average**</b>			<b>9.3</b>	
<b>Median**</b>			<b>9.0</b>	

\* average of growth rates in the period

\*\* excluding outliers

Source : Turkstat

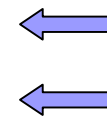
# Industrial production: Turkey and her Peers (s.a., 2005Q1 = 100)



## GDP Growth (% change over a year ago)

	2008	2009f	2008 Q3	2008 Q4	2009F Q1
CEE8	4.1	-7.0	4.5	-0.8	-7.8
(CEE5)	3.9	-2.3	4.3	1.5	-1.9
Bulgaria	6.0	-3.7	6.8	3.5	-3.5
Czech Republic	3.2	-2.0	4.0	0.2	-3.4
Hungary	0.5	-6.0	1.3	-2.5	-6.4
Poland <sup>1</sup>	4.9	-1.0	5.0	3.0	0.5
Romania	7.0	-5.8	9.2	2.9	-6.4
Russia	5.6	-8.7	6.0	1.2	-9.5
Turkey <sup>1</sup>	1.1	-7.5	1.2	-6.2	-9.5
Ukraine <sup>1</sup>	2.7	-16.6	7.1	-7.9	-18.4

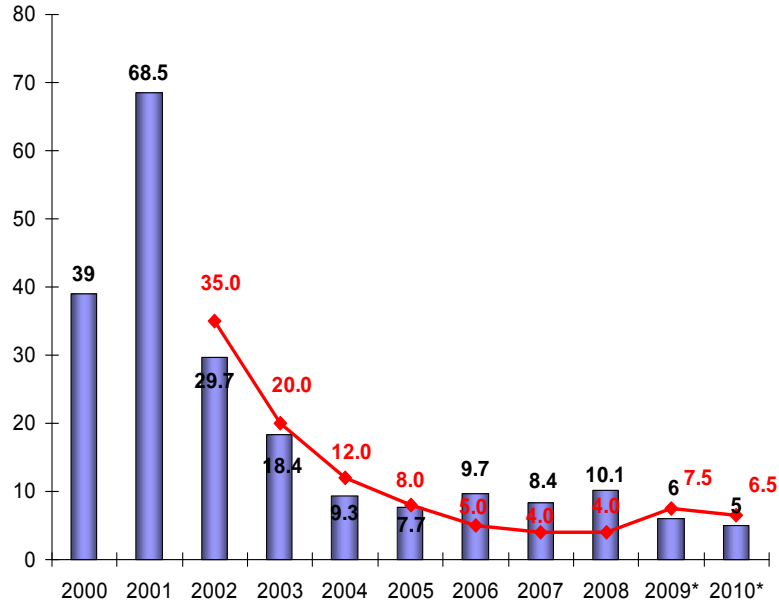
<sup>1</sup> CEE5: Bulgaria, Czech Republic, Hungary, Poland, Romania



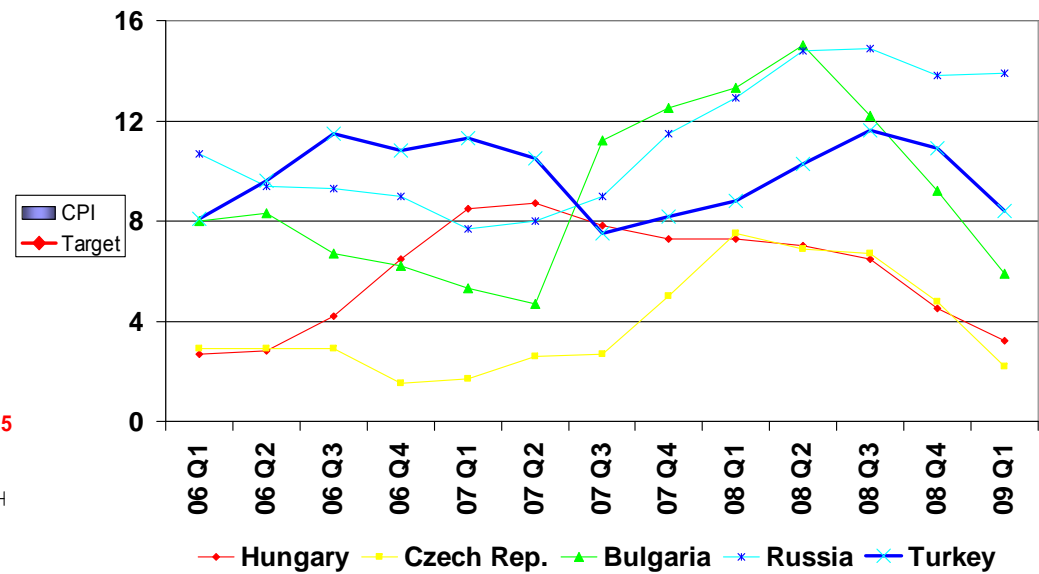
Source: IIF

# Inflation no more concern, at least in the short-term

**Inflation**



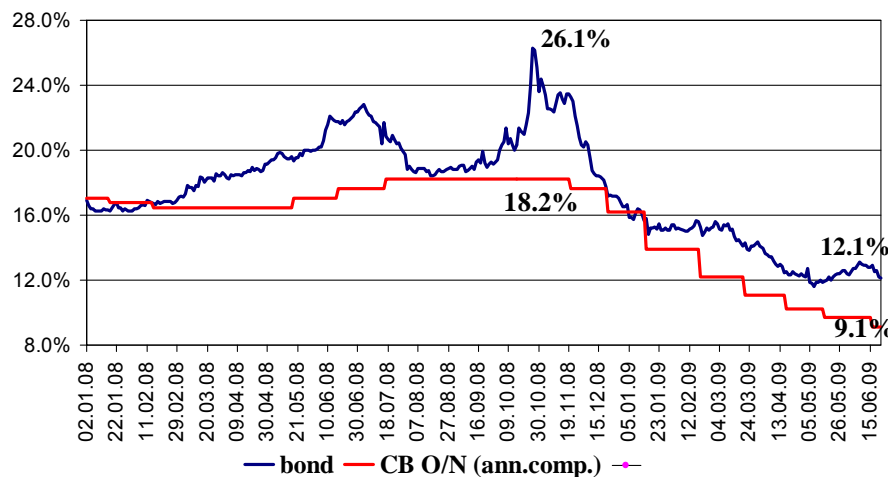
**CPI Inflation**



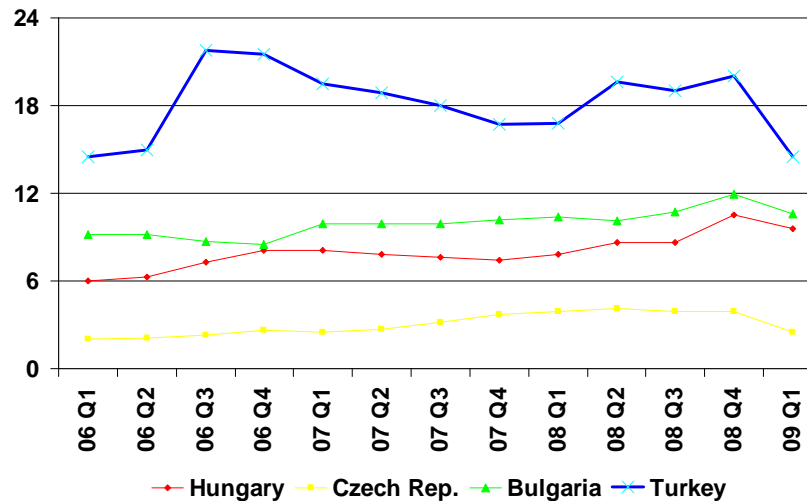
Source: Turkstat and IIF

# Interest rates declining

## Bond Rates and CB's O/N Rates



## Selected Interest Rates



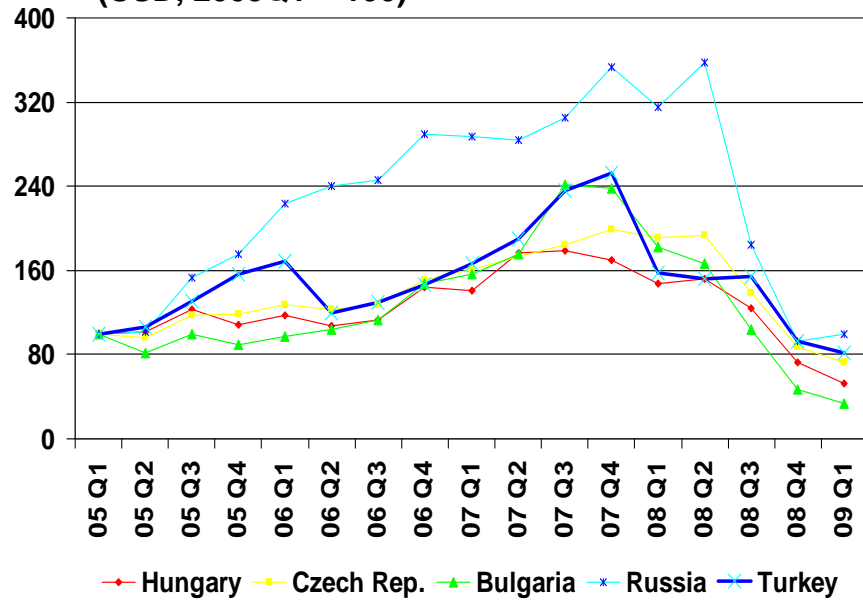
\* Hungary: 90-day Treasury bill auction rate. Czech Rep.: Interbank deposit rate (3-month). Bulgaria: Short-term lending rate (annual). Russia: Central bank refinancing rate. Turkey: Treasury bill (average auction yield).

\*\* Source: IIF

Source: ISE, CBRT and IIF

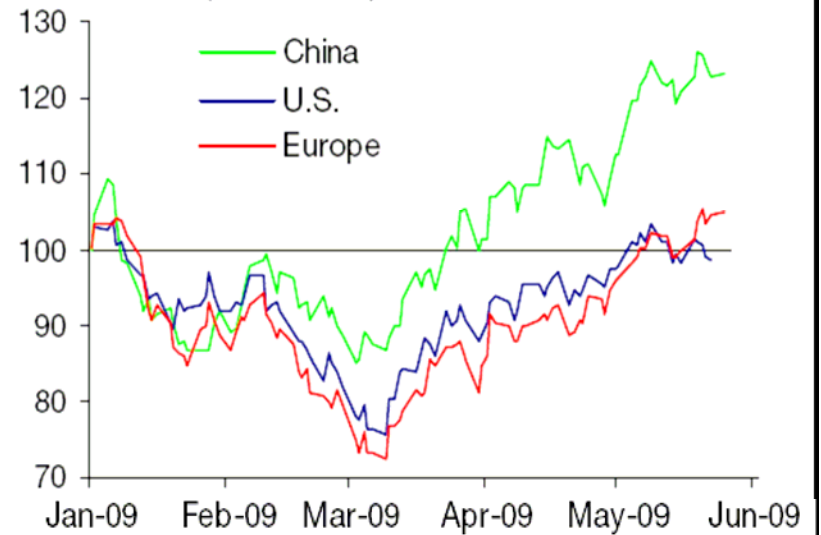
# Stock Exchange Performances

**Equity Performance by CEE Countries**  
(USD, 2005Q1 = 100)



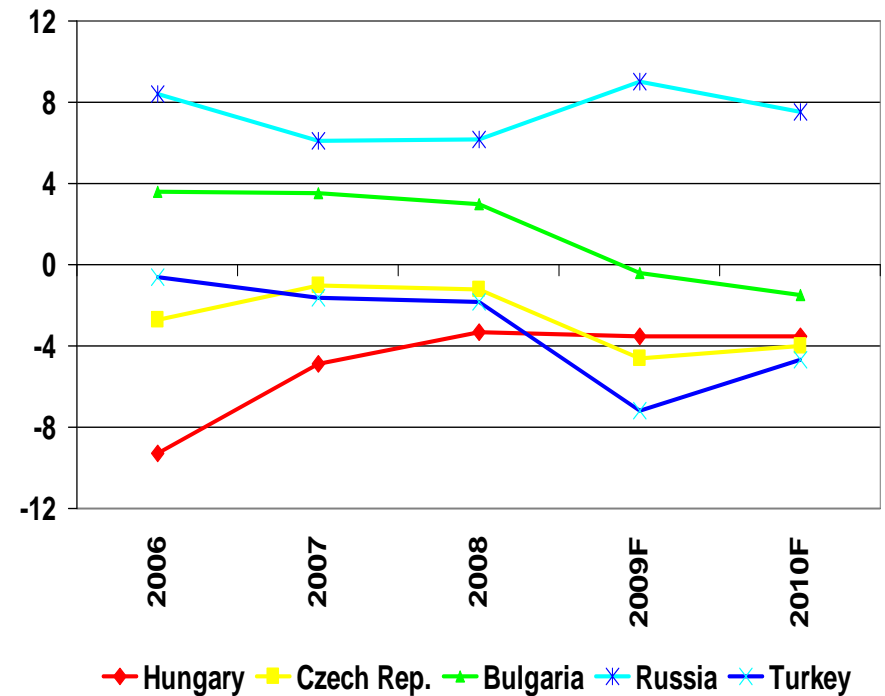
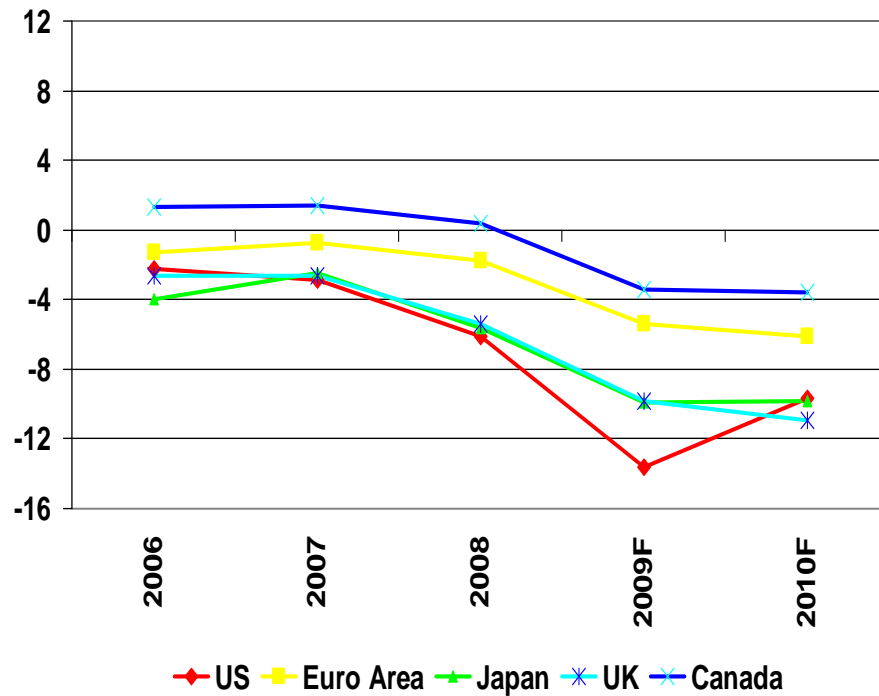
**Equity Performance by Region**

MSCI indices (US\$ returns), end-2008=100



\*\* Source: IIF

# Fiscal easing everywhere (Budget Balance / GDP, %)



\*\* Source: IIF and WEO April 2009

# Fiscal Easing in Turkey

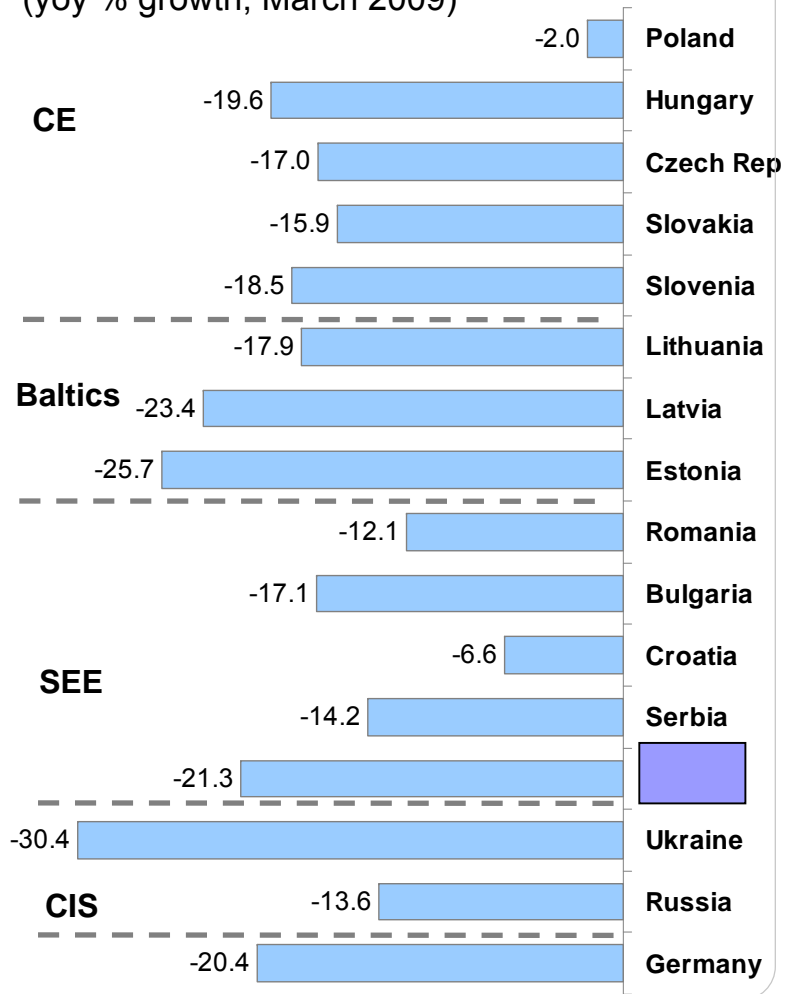
SELECTED ITEMS FROM CENTRAL ADMINISTRATION BUDGET (YTL million)							
	Jan. - May 2008	Jan. - May 2009	real change (%)	2008 budget realization	2009 budget target	Jan. - May. 2008 / year-end real.	Jan. - May. 2009 / year-end target
				<b>208,898</b>	<b>248,758</b>	<b>40.2</b>	<b>34.7</b>
Tax Revenues	70,060	66,233	-11.9	168,087	202,090	41.7	32.8
Non-Tax Revenues	11,239	16,904	40.2	34,298	40,867	32.8	41.4
Other	2,663	3,078	7.7	6,513	5,801	40.9	53.1
				<b>225,967</b>	<b>259,156</b>	<b>38.1</b>	<b>41.2</b>
<b>Non-interest expenditures</b>	<b>66,425</b>	<b>80,780</b>	<b>13.4</b>	<b>175,306</b>	<b>201,656</b>	<b>37.9</b>	<b>40.1</b>
I. Personnel expenditures	20,522	23,783	8.0	48,825	57,211	42.0	41.6
II. Government premiums to social security	2,568	2,882	4.6	6,402	7,243	40.1	39.8
III. Purchases of goods and services	7,426	8,798	10.5	23,941	25,454	31.0	34.6
IV. Current transfers	30,289	38,338	18.0	70,116	87,956	43.2	43.6
<i>Duty losses of SEEs</i>	<i>681</i>	<i>2,050</i>	<i>180.8</i>	<i>2,041</i>	<i>3,081</i>	<i>33.4</i>	<i>66.5</i>
<i>Transfers to social security institutions</i>	<i>16,215</i>	<i>21,527</i>	<i>23.8</i>	<i>36,156</i>	<i>47,738</i>	<i>44.8</i>	<i>45.1</i>
<i>Agricultural transfers</i>	<i>3,935</i>	<i>3,424</i>	<i>-18.9</i>	<i>5,811</i>	<i>4,951</i>	<i>67.7</i>	<i>69.1</i>
<i>Other transfers</i>	<i>9,459</i>	<i>11,337</i>	<i>11.7</i>	<i>26,108</i>	<i>32,185</i>	<i>36.2</i>	<i>35.2</i>
V. Capital expenditures	2,960	3,706	16.7	18,441	14,839	16.1	25.0
VI. Other expenditures	2,660	3,271	14.7	7,583	8,953	35.1	36.5
<b>Interest expenditures</b>	<b>19,598</b>	<b>26,119</b>	<b>24.2</b>	<b>50,661</b>	<b>57,500</b>	<b>38.7</b>	<b>45.4</b>
				<b>33,592</b>	<b>47,102</b>	<b>52.2</b>	<b>11.5</b>
				<b>-17,069</b>	<b>-10,398</b>	<b>12.1</b>	<b>198.9</b>

\*\* Source: Ministry of Finance

# Turkey has been one of those, hit the hardest among the CEE

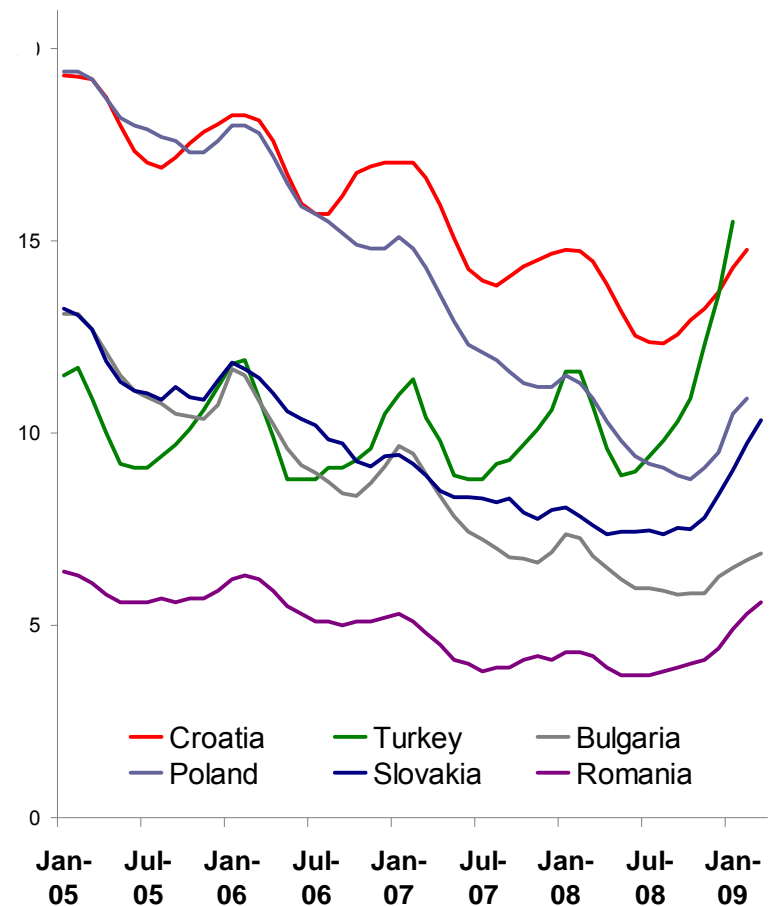
## Industrial Production

(yoy % growth, March 2009)



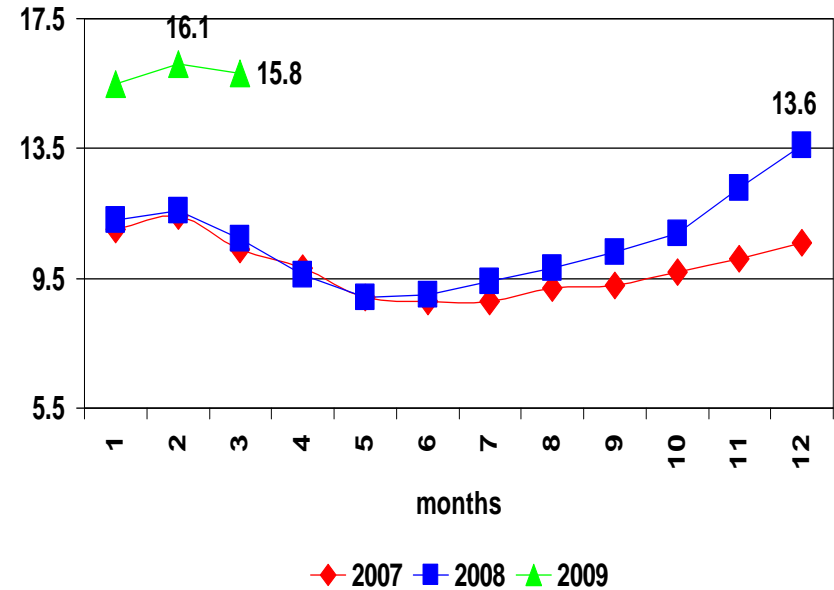
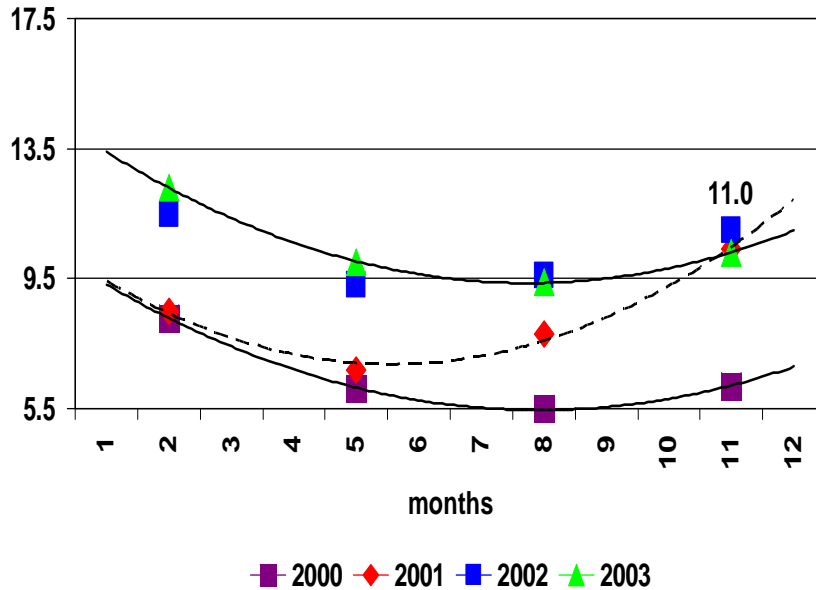
## Unemployment rate

(%, 2005-'09)



Source: Bloomberg, UniCredit CEE Strategic Analysis

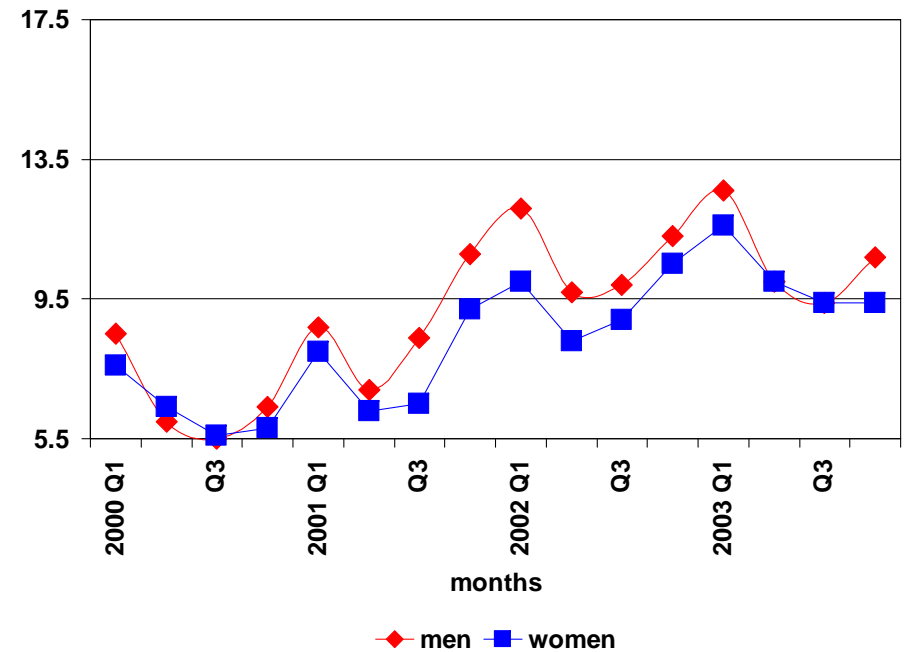
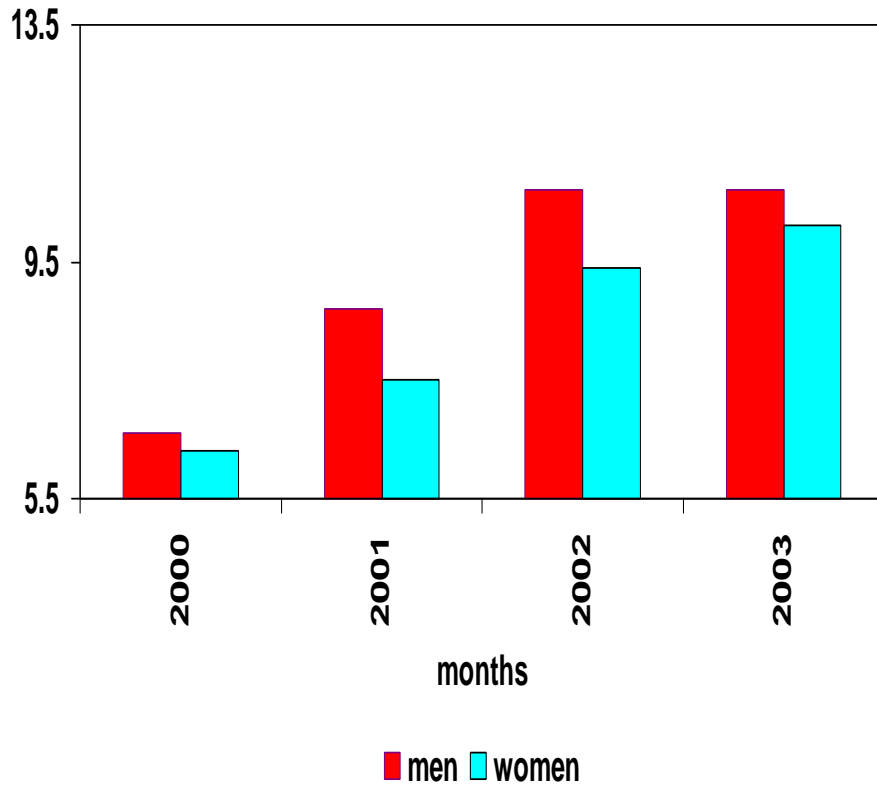
# Unemployment Rate (%, 2001 vs. 2008 crises)



	2002	2003	2004	2005	2006	2007	2008
<b>GDP Growth (%)</b>	6.2	5.3	9.4	8.4	6.9	4.7	1.1
<b>New Employment</b>	-170	-207	644	255	284	235	456
<b>Non-Agricultural New Employment</b>	461	86	409	1,162	689	347	307
<b>Agricultural New Employment</b>	-631	-293	235	-907	-405	-112	149

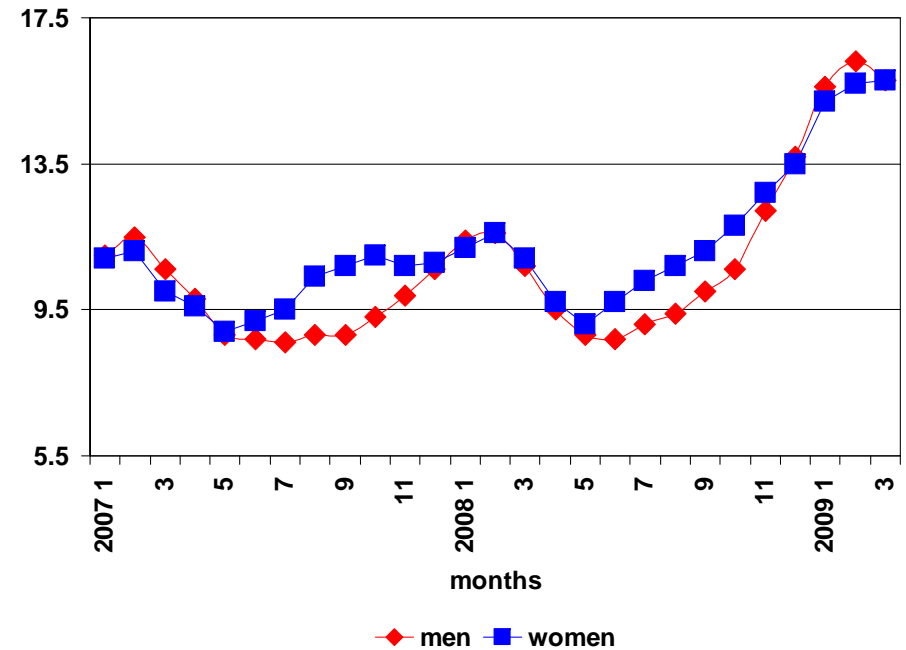
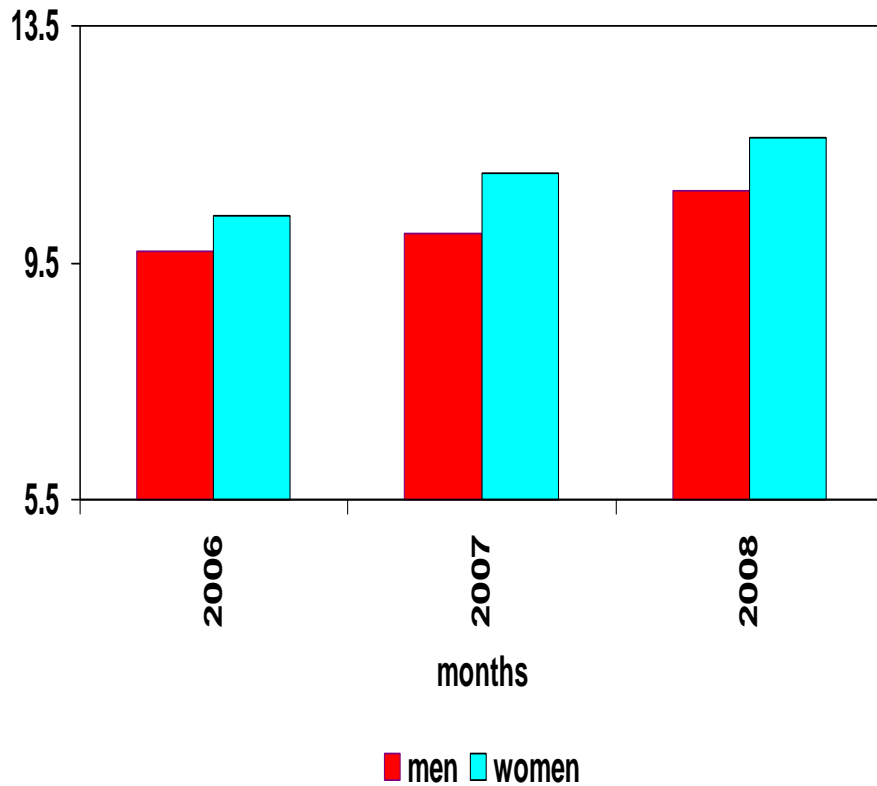
Source : Turkstat

# Unemployment Rate (%, Men vs Women during 2001 crisis)



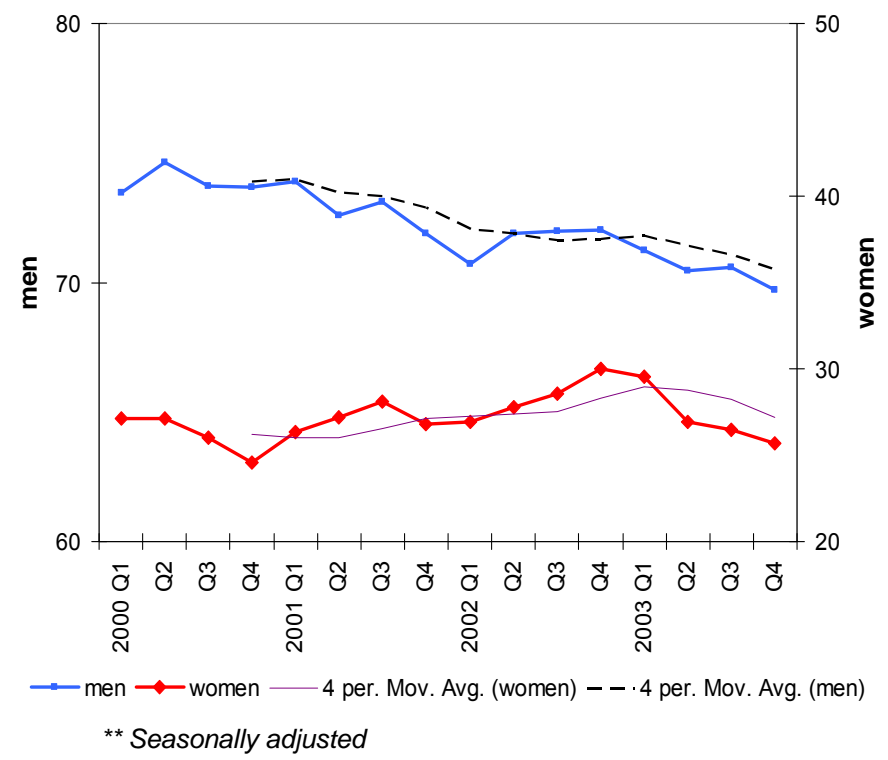
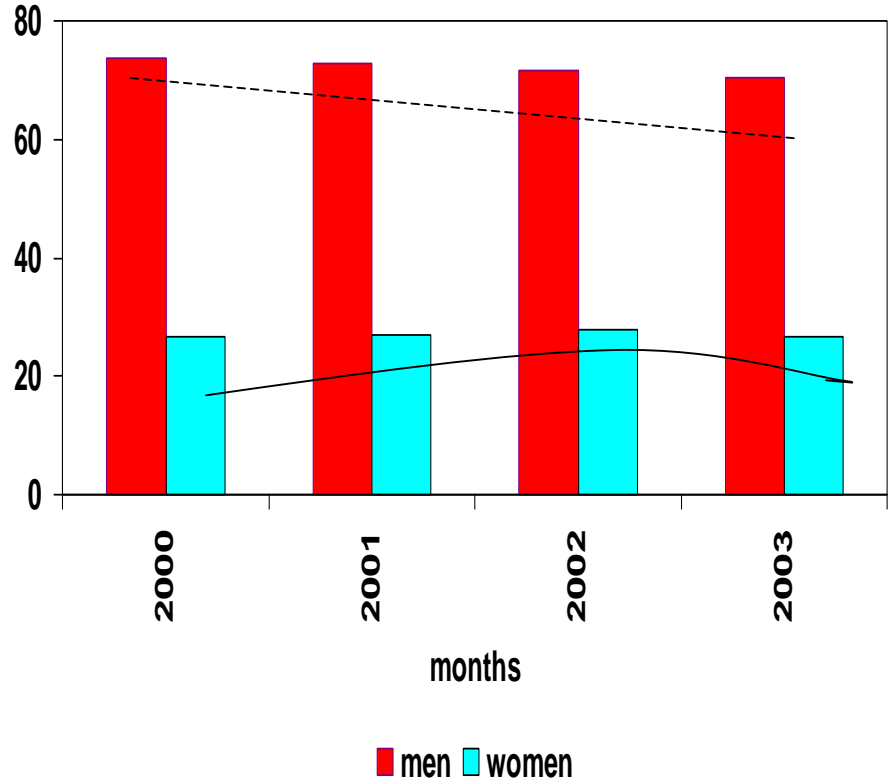
Source : Turkstat

# Unemployment Rate (%, Men vs Women during 2008 crisis)



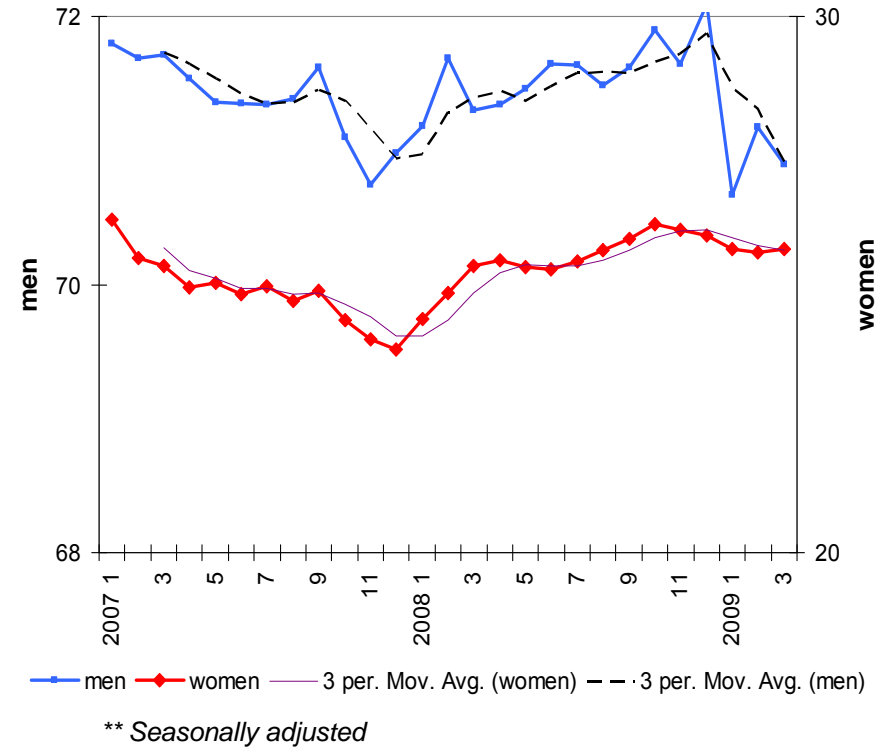
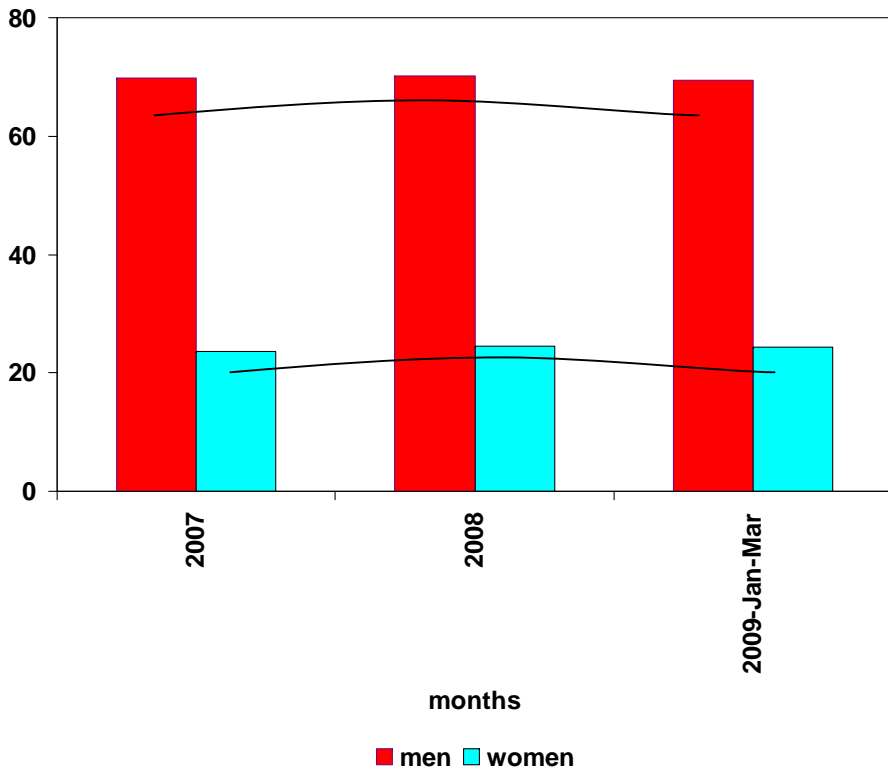
Source : Turkstat

# Labor Force Participation Rate (%, Men vs Women during 2001 crisis)



Source : Turkstat

# Labor Force Participation Rate (%, Men vs Women during 2008 crisis)

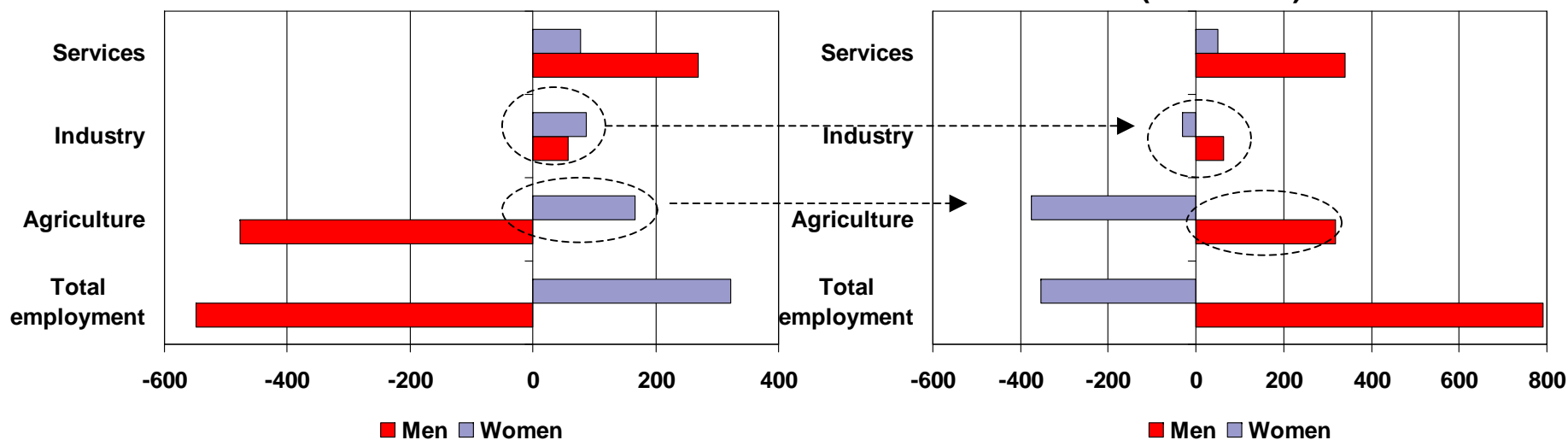


Source : Turkstat

# Women labor substituted for Men's Labor ? – 2001 crisis

Change in Employment between 2000 and 2002 (thousand)

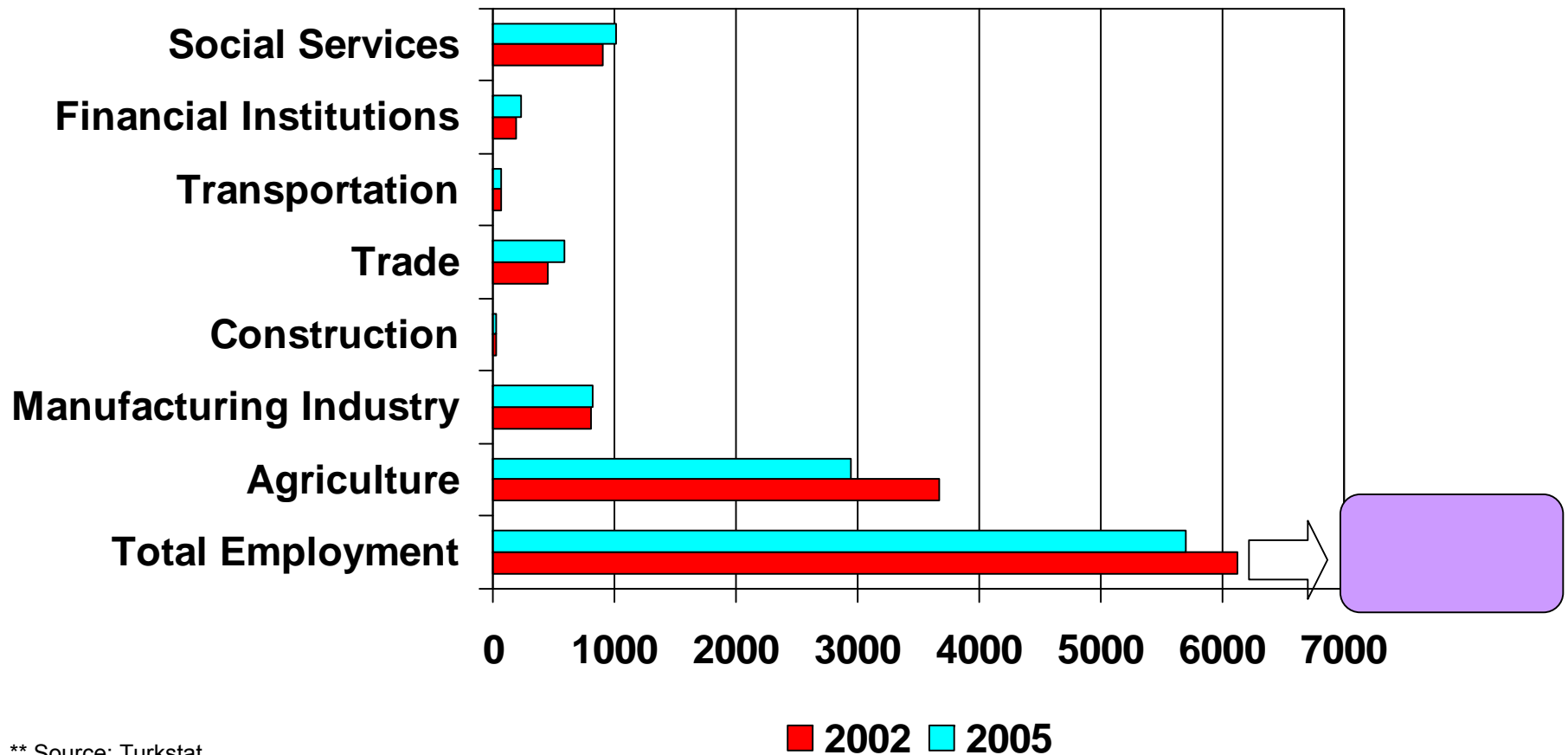
Change in Employment between 2002 and 2004 (thousand)



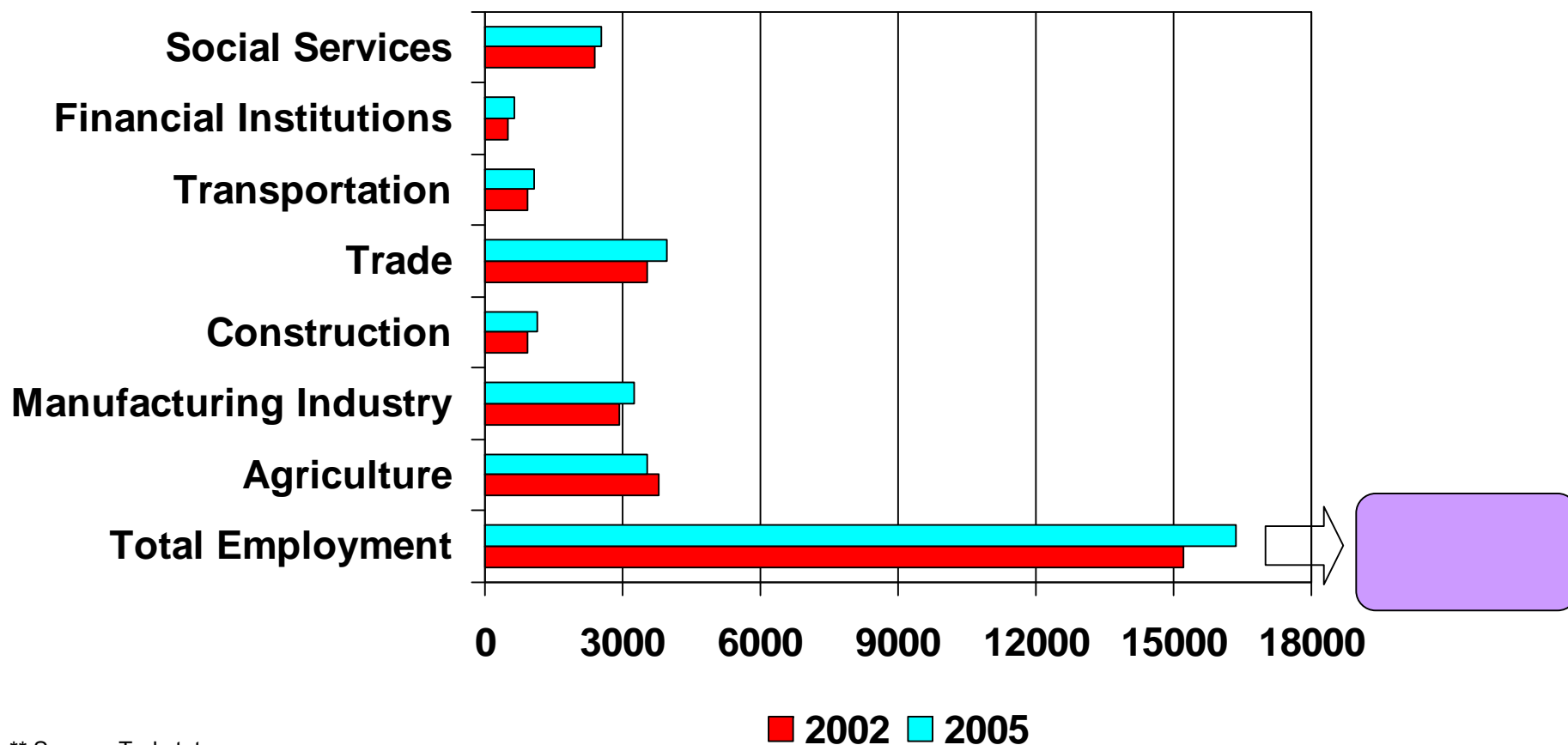
*In the early years of the crisis, women's labor was substituted for men's labor. However, during normalization and recovery, women were back homes.*

\*\* Source: Turkstat

# Sectorial distribution of women's employment – in the aftermath of 2001 crisis (thousand)



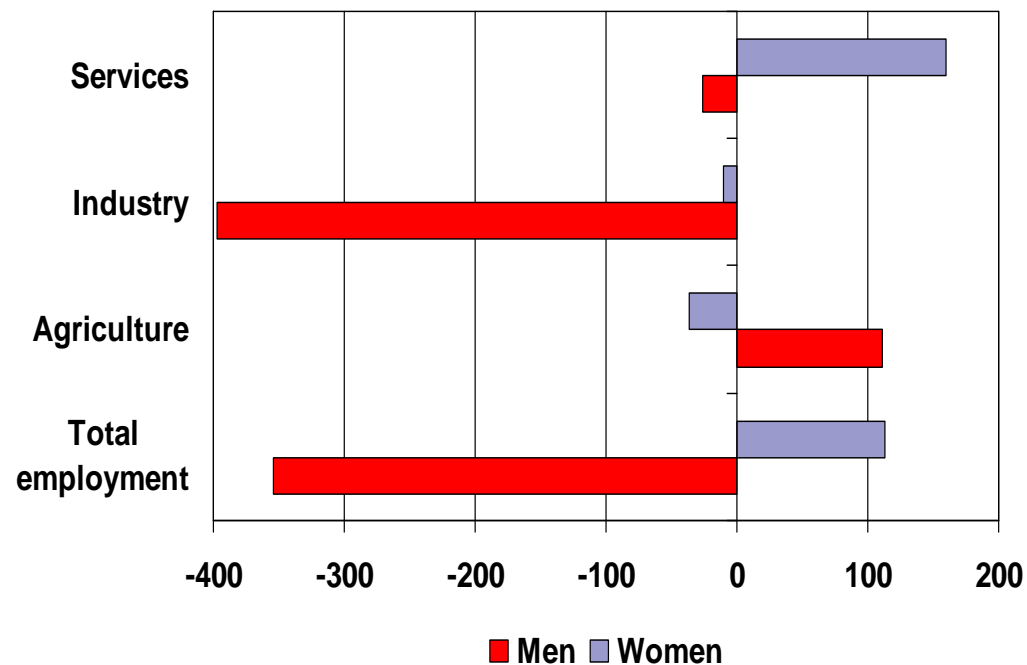
# Sectorial distribution of men's employment – in the aftermath of 2001 crisis (thousand)



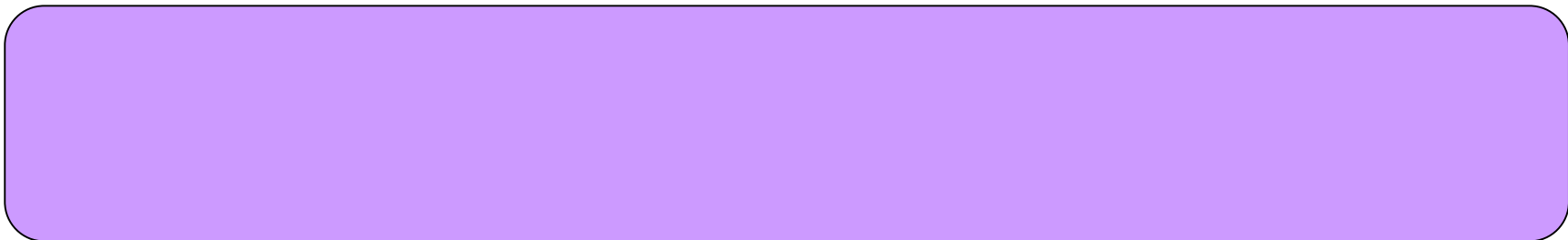
\*\* Source: Turkstat

# Women labor substituted for Men's Labor ? – 2008 crisis, early signals

Change in Employment between Mar. 2008 and Mar. 2009  
(thousand)

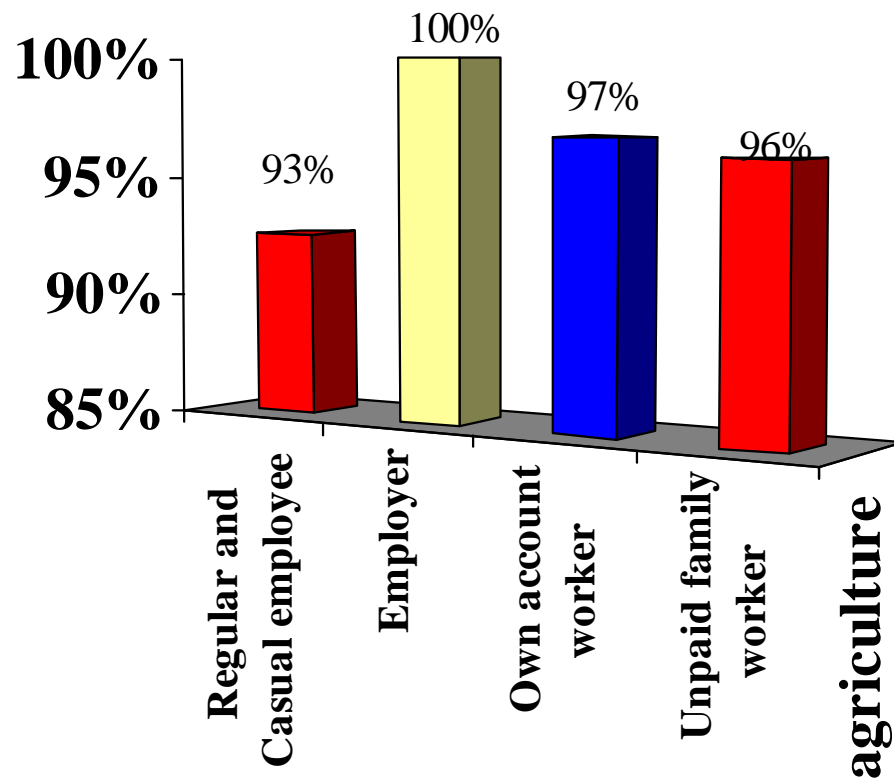


\*\* Source: Turkstat

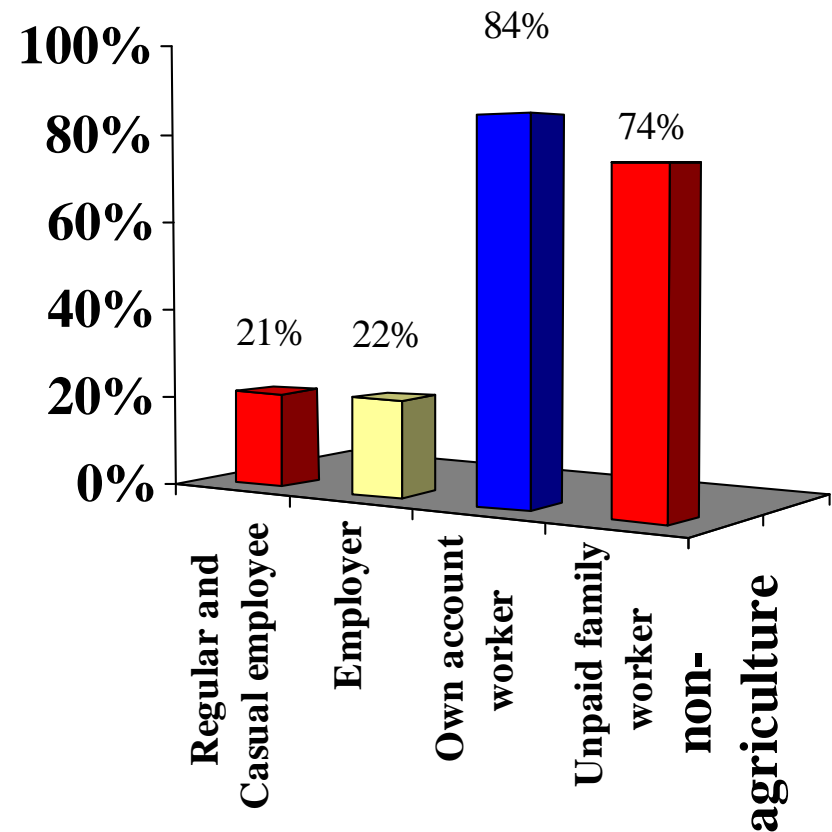


# Employed Women not Registered to Any Public Social Security Institution (March 2009)

## AGRICULTURAL SECTOR



## NON-AGRICULTURAL SECTOR



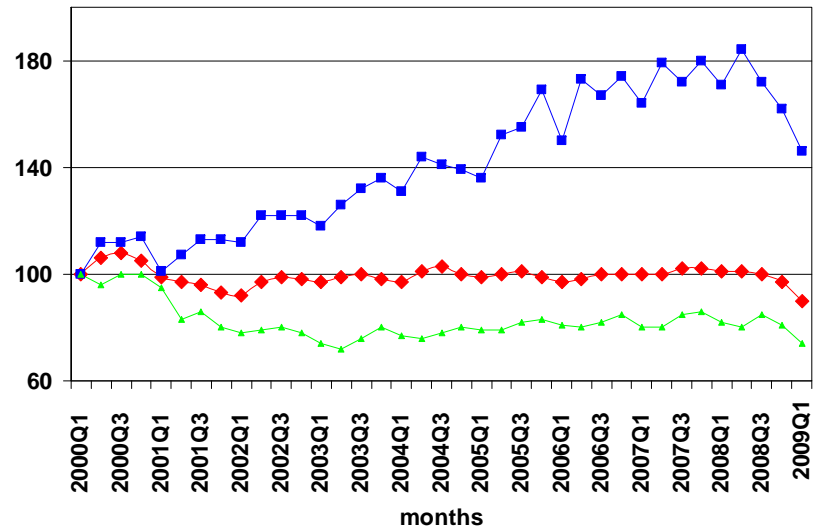
Source: Turkstat

# Employment in terms of Gender not Registered to Any Public Social Security Institution

RATIO OF EMPLOYED PEOPLE WHO ARE NOT REGISTERED TO ANY SOCIAL SECURITY INSTITUTION						
	Male	Male- Agr.	Male- Non-Agr.	Female	Female- Agr.	Female- Non-Agr.
1999	43.1	81.4	27.0	74.6	98.1	27.9
2000	43.7	82.0	29.5	69.5	96.7	27.9
2001	45.0	85.2	29.7	73.3	99.3	28.5
2002	43.9	81.1	31.7	72.5	99.5	31.9
2003	44.2	83.7	31.5	71.3	99.2	32.0
2004	46.4	83.1	33.7	71.4	98.6	35.0
2005	43.8	79.6	33.8	68.3	98.5	36.1
2006	42.3	82.7	33.1	66.0	105.2	33.3
2007	40.1	78.5	32.4	60.7	99.0	32.2
2008	38.1	77.8	30.0	58.4	99.1	28.9

\*\* Source: Turkstat

# Productivity and Wages



2000Q1 = 100

◆ no. of workers    ■ output per capita    ▲ real wage

	TL			USD			Wage Ratio
	Monthly average gross wage			Monthly average gross wage			
	Total	Female	Male	Total	Female	Male	
<b>Total</b>	1,103	1,091	1,107	770	762	773	99%
<b>Law makers, senior administrators and managers</b>	2,738	2,790	2,723	1,912	1,949	1,902	102%
<b>Professionals</b>	1,860	1,685	1,982	1,299	1,177	1,384	85%
<b>Junior professionals</b>	1,359	1,233	1,414	949	861	988	87%
<b>Clerical employees</b>	1,153	1,056	1,226	805	738	856	86%
<b>Service and sales workers</b>	793	750	804	554	524	562	93%
<b>Qualified agriculture, husbandry, hunting, forestry and fishing</b>	840	691	851	587	483	594	81%
<b>Artists and related workers</b>	863	692	893	603	483	624	77%
<b>Machine and plant operators and installers</b>	877	693	901	613	484	629	77%
<b>Non-qualified workers</b>	734	656	751	513	458	525	87%

Source: TurkStat, Structure of earnings survey, 2006



# Closing words

- Turkey is faced with a more severe crisis today compared to 2001 crisis which had its roots in domestic factors.
- Today global recession and contraction in world trade impedes return to recovery.
- Turkey has been one of those hit the most among the CEE peers.
- Although there are more signs of “green shoots” in the global economy suggesting that the worst may be over, risks are now beginning to large budget deficits and impacts of monetary and fiscal easing.
- Turkey started to implement crisis management measures, after notable delay.
- Deteriorating public finances and labor market weaknesses are the major threats ahead of Turkey.
- Unemployment and depressed domestic demand may forestall the return to recovery.



# Closing words

- During both crises in Turkey, unemployment rate surged, where the increase in unemployment has been sharper in 2008 crisis.
- During both crises in Turkey, an adjustment in the labor market took place which have gendered consequences.
- In both crises, LFP rate of men declined significantly, while that of women's increased or remained stable.
- This is an indication that women start to look for jobs at whatever costs during the crises, while men are returning home.
- In the early years of 2001 crisis, women's labor was substituted for men's labor. However, during normalization and recovery, women were back homes!
- Similarity in 2008 crisis where women employment increased and men employment decreased.
- Informal sector practices –lack of social coverage- increase during the crises where it is predominantly women who are willing to work under those conditions.
- Structural deficiencies and gendered structure of labor markets is the biggest challenge ahead of Turkey in the near future.



Thank You...