Trade, SMEs and Development in Tunisia

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Motivation

- Trade is good for both developing and developed countries
  - Empirical evidence from macro data
- Firms exposed to trade are performing well
  - More productive
  - More profitable
  - Create more jobs
- Recent empirical evidence on developed countries
- Less research on
  - Developing countries
  - Importers
  - Services

Motivation

- Impact of the exposure to international trade in Tunisia on
  - Trade creation
  - Productivity
  - Profitability

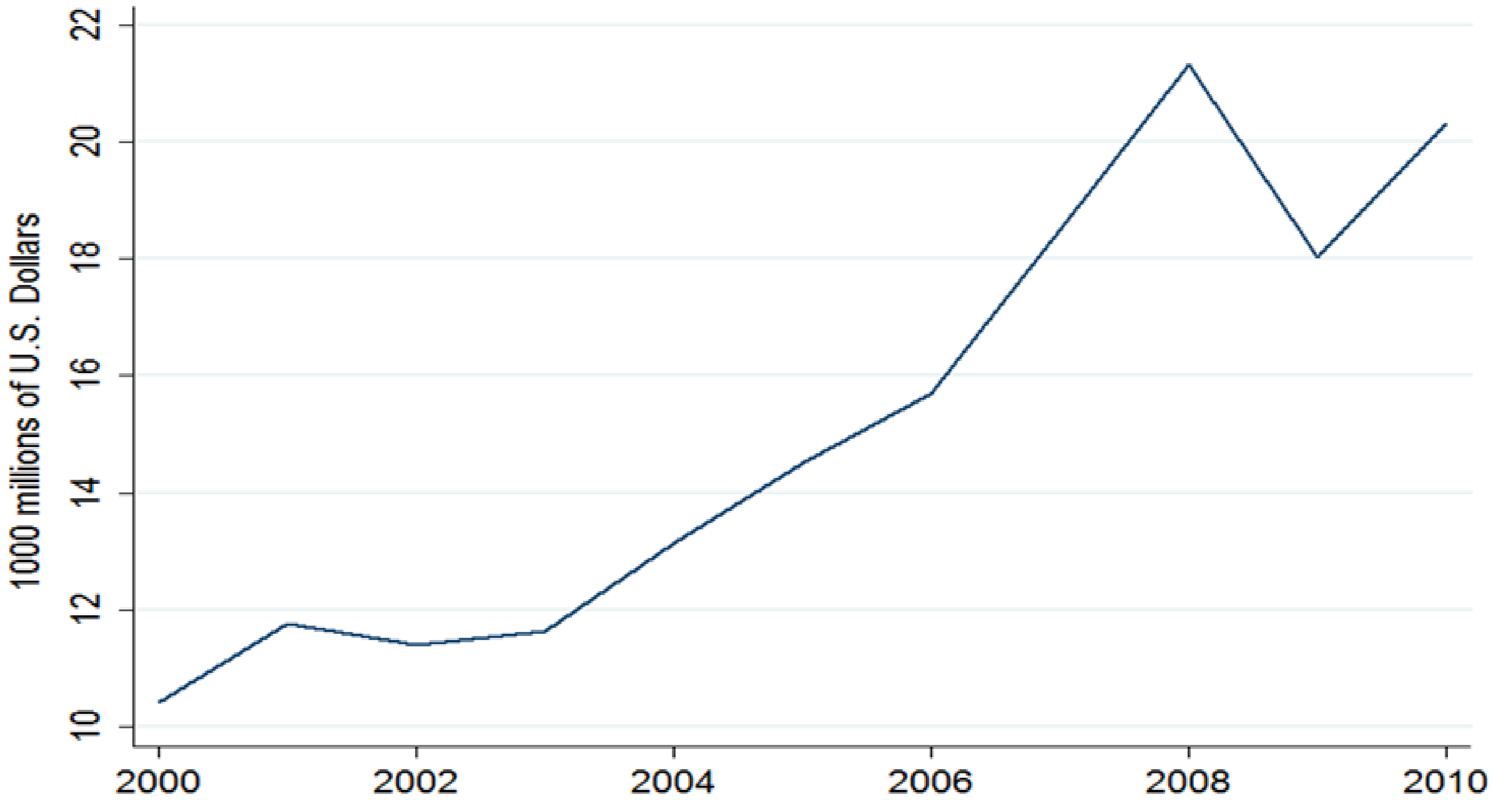
- Focus on
  - onshore non exporters and importers
  - onshore exporters and non importers
  - onshore exporters and importers
  - offshore exporters and non importers
  - offshore exporters and importers

- Use of an unique firm level data in Tunisia

Trade policy in Tunisia

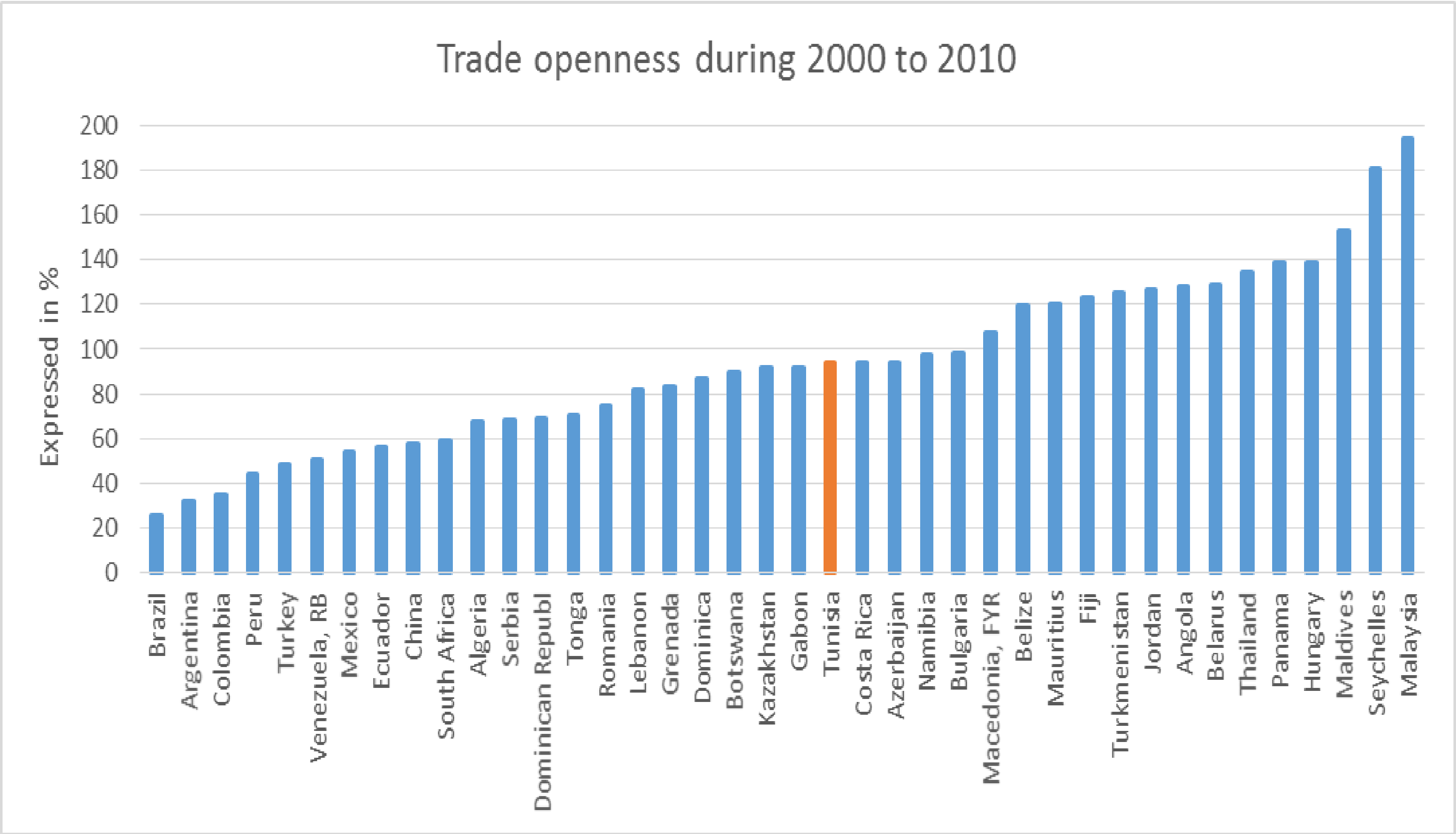
- 1972: Creation of an offshore regime
- Mid eighties:
  - Unilateral tariff liberalization
  - Reform of import procedures
  - Removal of import restrictions
- WTO member since its creation
- Preferential trade agreements
  - EU
  - GAFTA
  - Etc.

Fact #1:
An overall increase in Tunisian exports



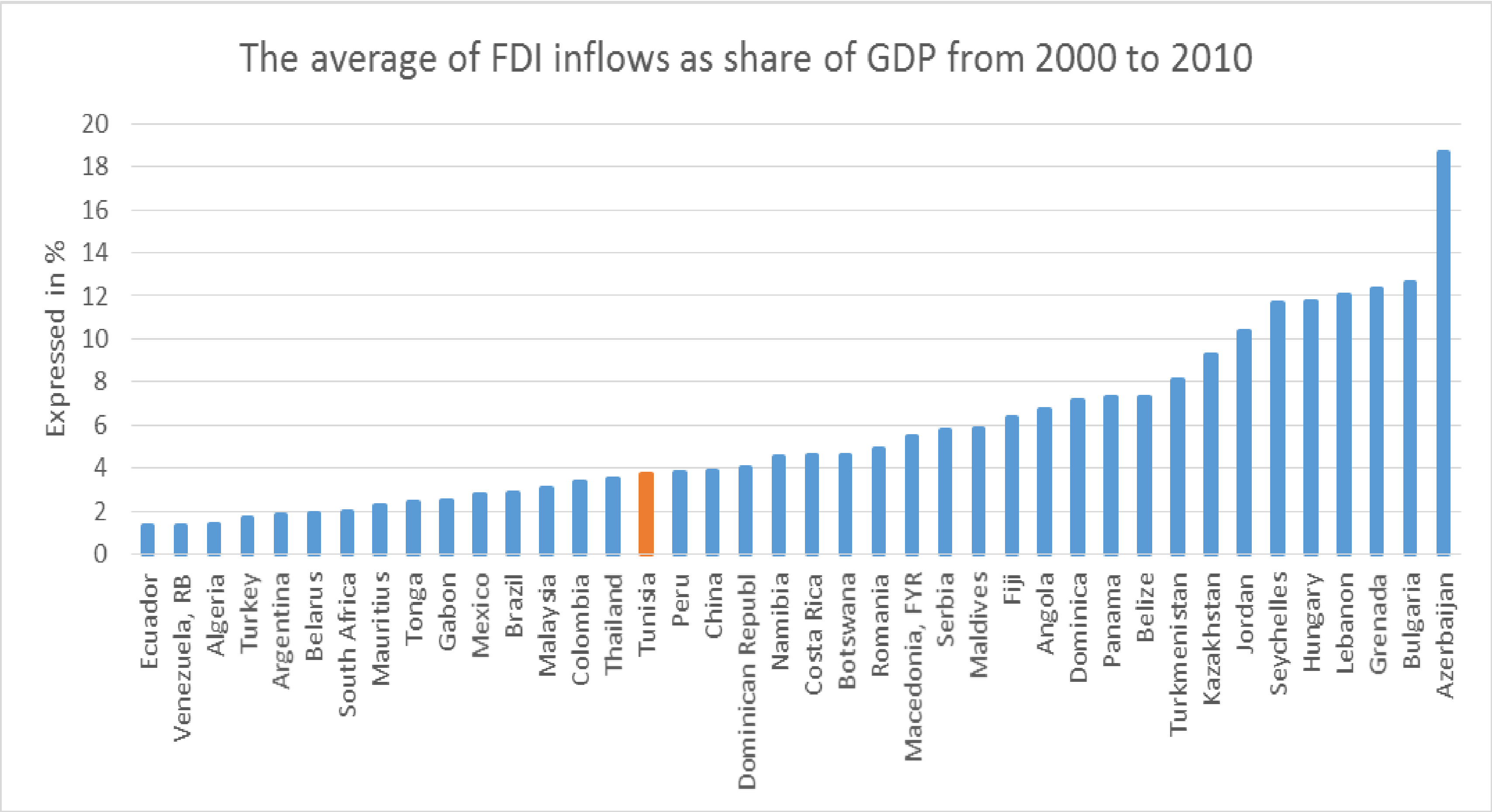
ITC 2015

Fact #2:
A relatively open country



ITC 2015

Fact #3:
Lower performance in attracting FDI



ITC 2015

Firm’s dynamic in Tunisia

- **Data**
  - Tunisian registry of firms (RNE)
  - Collected by the National Institute of Statistics in Tunisia (Institut National de la Statistique)
  - Data on employment, age and main activity of all registered private firms
  - Firm level imports and exports at HS6 level (from customs)
  - Period 2000-2010

Fact #4: SMEs or MSEs?

- **96%** of firms are **micro**
  - less than 6 employees
- **2,7%** of firms are **small**
  - between 6-49 employees
- **0,5%** of firms are **medium**
  - between 50 and 199 employees
- **0,15%** of firms are **big**
  - more than 200 employees

Fact #5: Offshore's importance

- **Offshore onshore dichotomy**
  - Imports inputs duty free
  - No specific regulations
  - No taxes

Fact #5: Offshore's importance

- **The importance of the offshore sector**
  - **2%** of firms
  - **29%** of total employment
  - **20%** of total turnovers
  - **78%** of total exports

Fact #5: Offshore's importance

Figure 1: Shares of firms by activity 2000-2010

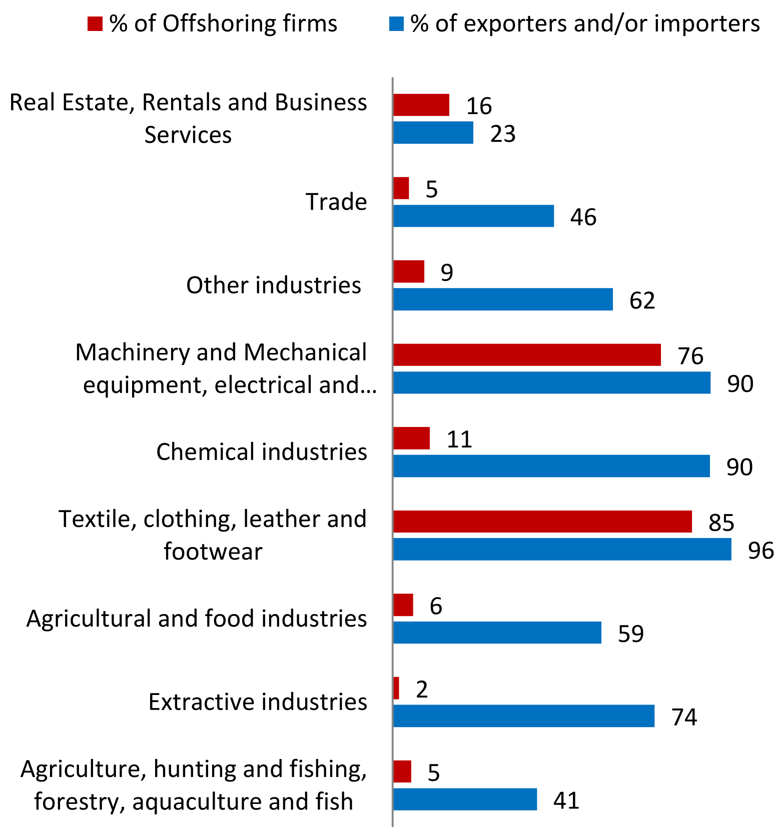
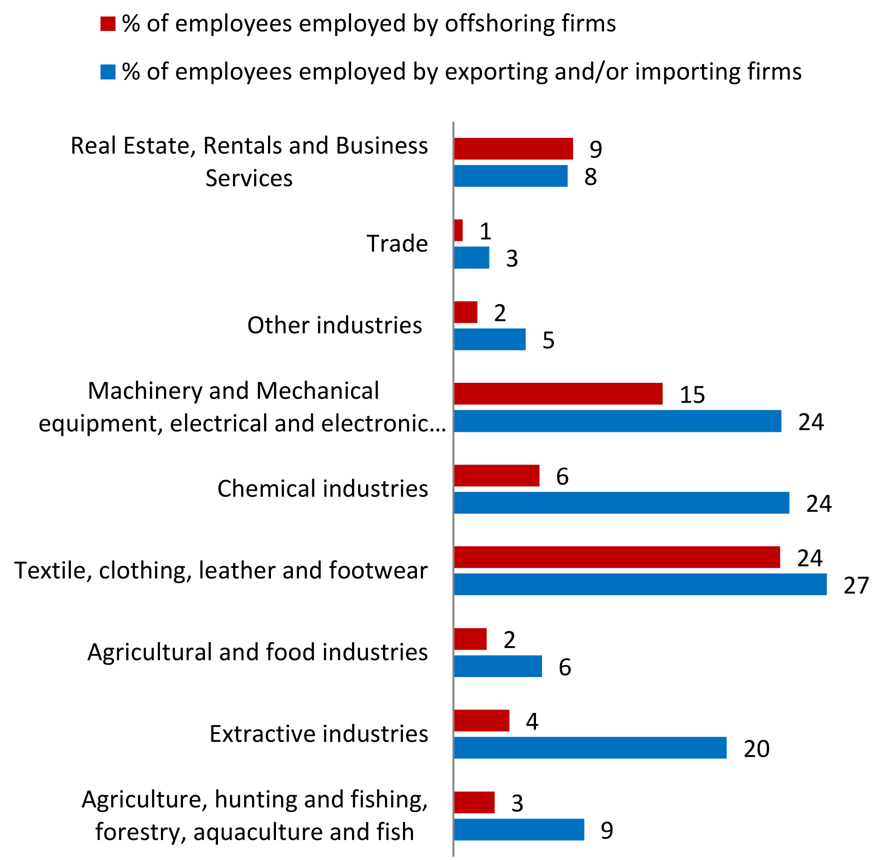
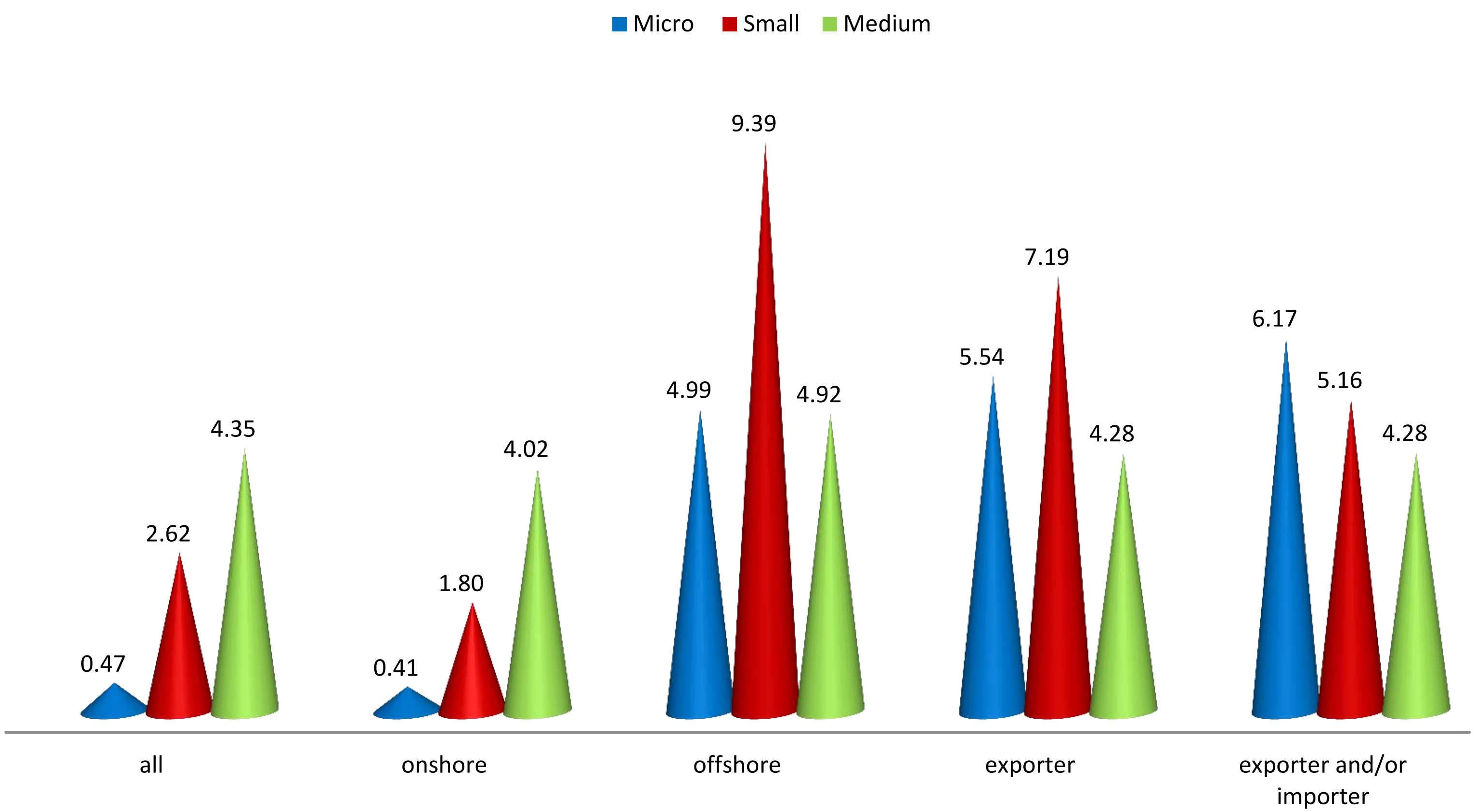


Figure 2: Shares in employment by activity 2000-2010



Fact #6: MSEs forever

Figure 3: Percentage of firms registering growth 2000-2010



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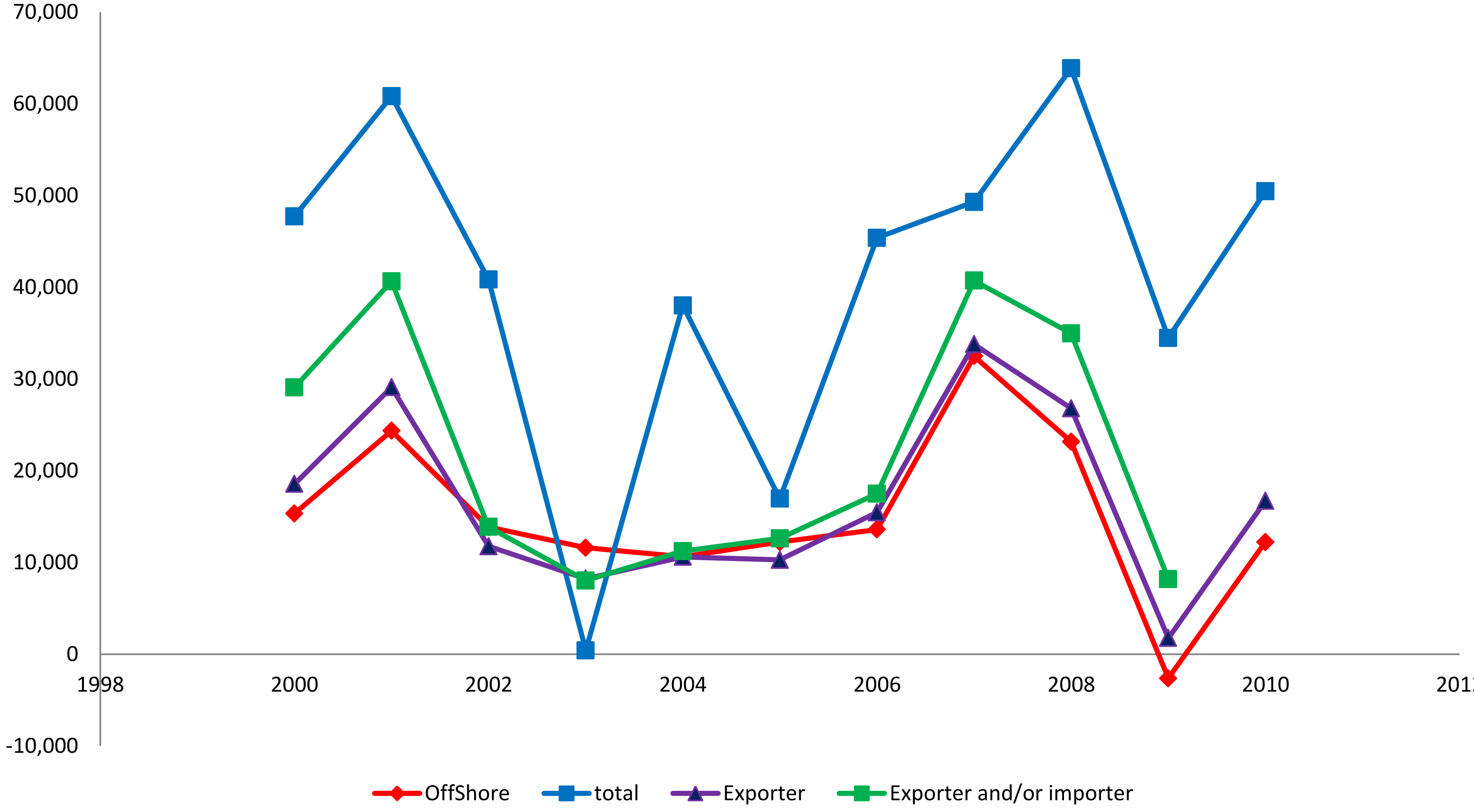
Fact #7: Traders are drivers of job creation



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Measures used

- Net trade creation

$$g_{ist} = 2\left[\frac{E_{ist} - E_{ist-1}}{E_{ist} + E_{ist-1}}\right]$$

Where E_{ist} is employment in firm i of type s at time t

- Productivity: Gross output per worker
- Profitability: Profits per worker respectively

Result #1: Effects of firm's international trade status on net job creation

	All firms	Firms with more than one employee			
		All	Manufacturing	Non manufacturing	Services
Onshore non exporting and importing firms	**0.026*** **	**0.02*** **	**0.085*** **	**0.058*** **	0.0021
	(0.0008)	(0.0017)	(0.005)	(0.006)	(0.002)
Onshore firms exporting and non importing	-0.048***	-0.06***	-0.012*	-0.046**	-0.0343***
	(0.003)	(0.006)	(0.012)	(0.026)	(0.008)
Onshore firms exporting and importing	0.008***	0.003*	0.09***	0.038***	-0.0009
	(0.0009)	(0.002)	(0.05)	(0.008)	(0.002)
Offshore firms exporting and non importing	0.021***	-0.003	0.008	**0.19*** **	**0.131*** **
	(0.0015)	(0.003)	(0.06)	(0.041)	(0.004)
Offshore firms exporting and importing	**0.078*** **	**0.07*** **	**0.165*** **	**0.142*** **	**0.143*** **
	(0.0008)	(0.002)	(0.046)	(0.047)	(0.004)
Firm's Size Effects	Yes	Yes	Yes	Yes	Yes
Time Effects	Yes	Yes	Yes	Yes	Yes
N	4960000	713556	164848	47064	493651
R2	0.0029	0.0059	0.0163	0.0117	0.0077

Result #2: Effects of firm's international trade status on productivity

	All firms	Firms with more than one employee			
		All	Manufacturing	Non Manufacturing	Services
Onshore non exporting and importing firms	**0.992*** **	**0.992*** **	**0.828*** **	**0.607*** **	**1.352*** **
	(0.006)	(0.006)	(0.001)	(0.012)	(0.007)
Onshore firms exporting and non importing	0.314***	0.031***	0.268***	0.471***	0.0532***
	(0.021)	(0.021)	(0.031)	(0.053)	(0.034)
Onshore firms exporting and importing	**1.434*** **	**1.434*** **	**1.232*** **	**1.14*** **	**1.895*** **
	(0.006)	(0.006)	(0.013)	(0.016)	(0.011)
Offshore firms exporting and non importing	-0.847***	-0.849***	-0.904***	-0.771***	-0.645***
	(0.010)	(0.010)	(0.017)	(0.085)	(0.017)
Offshore firms exporting and importing	**0.566** **	**0.566*** **	**0.382*** **	**0.920*** **	**0.909*** **
	(0.005)	(0.005)	(0.012)	(0.095)	(0.016)
Firm's Size Effects	Yes	Yes	Yes	Yes	Yes
Time Effects	Yes	Yes	Yes	Yes	Yes
N	336806	326572	105114	30712	190313
R2	0.200	0.200	0.213	0.18	0.298

Result #3: Effects of firm's international trade status on profitability

	All firms	Firms with more than one employee			
		All	Manufacturing	Non Manufacturing	Services
Non exporting and importing firms	**1.435*** **	**1.436*** **	**1.00*** **	**0.657*** **	**2.038*** **
	(0.013)	(0.013)	(0.0399)	(0.024)	(0.013)
Onshore firms exporting and non importing	0.522***	0.522***	0.218***	1.572***	0.799***
	(0.047)	(0.047)	(0.086)	(0.118)	(0.065)
Onshore firms exporting and importing	**1.963*** **	**1.963*** **	**1.674*** **	**1.536*** **	**2.375*** **
	(0.013)	(0.014)	(0.037)	(0.032)	(0.019)
Offshore firms and non importing	-0.170***	-0.174***	-0.077***	-0.366***	-0.402***
	(0.024)	(0.024)	(0.049)	(0.138)	(0.029)
Offshore firms and importing	**0.618** **	**0.618*** **	**0.334*** **	**1.996*** **	**0.942*** **
	(0.011)	(0.012)	(0.035)	(0.248)	(0.025)
Firm's Size Effects	Yes	Yes	Yes	Yes	Yes
Time Effects	Yes	Yes	Yes	Yes	Yes
N	204018	198799	63723	17729	117189
R2	0.160	0.160	0.083	0.205	0.316

Conclusions

- Trade exposed firms are creating more jobs, are more productive and more profitable

- Two way traders are the most performing firms

Conclusions

- Offshore firms tend to create more jobs compared to onshore firms

- but they are less productive and less profitable than onshore firms
  - **no knowledge transfer?**

Conclusions

- **Importers perform better**
  - Good quality inputs?
  - More integrated in the international markets?

Conclusions

- **Firms in services perform well**
  - Exporting offshore firms in services contribute to employment more than in manufacturing
  - More profitable and more productive than in the manufacturing sector