

Midterm Examination

Revised: October 21, 2013

You have 90 minutes to complete this exam. Please answer each question in the space provided and show all of your work. You may consult one page of notes and a calculator, but devices capable of wireless transmission are prohibited.

I understand that the honor code applies: I will not lie, cheat, or steal to gain an academic advantage, or tolerate those who do.

(Name and Signature)

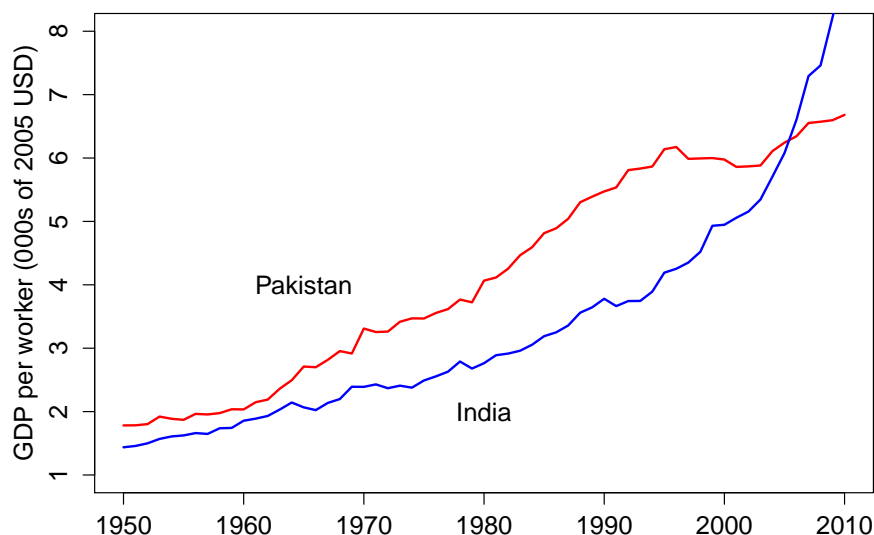


Figure 1: GDP Per Worker in Pakistan and India.

1. *Prospects for Pakistan.* You have been asked to write a short report on the prospects for Pakistan: Can we expect it to grow as India has, or are there factors that you think will inhibit future economic performance?

Pakistan is a large country, with an ethnically and linguistically diverse population of 180 million and an equally diverse geography. Its level of development

	India	Pakistan	
Year	Y/L	Y/L	K/L
1990	3.780	5.473	9.040
2010	9.010	6.681	10.577

Table 1: Aggregate data for Pakistan and India. The numbers are thousands of 2005 US dollars. Source: Penn World Table, Version 7.1.

	Pakistan	India
Voice and accountability	26.3	59.2
Political stability	0.5	12.7
Govt effectiveness	22.3	54.5
Regulatory quality	29.9	40.3
Rule of law	20.7	52.6
Control of corruption	15.6	35.1

Table 2: Governance indicators for Pakistan and India. The numbers are percentiles and range from 0 (worst) to 100 (best). Source: World Bank.

after independence in 1947 was comparable to India's. The Penn World Table estimates that GDP per worker in 1950 was 25% above India's, with somewhat less difference in GDP per capita. Since 1990, however, India has grown rapidly, while Pakistan has not. See Figure 1 and Table 1.

The country is now a democracy, but has alternated democratic and military rule throughout its history. The Economist Intelligence Unit's Country Report states: "Pakistan's 1973 constitution established Pakistan as a federal parliamentary democracy, but it has undergone major amendments to mould the political system to the wishes of successive political leaders. ... Still in force before the October 1999 coup launched by General Pervez Musharraf, it had undergone major amendments, often to legitimise the authoritarian actions of successive administrations. ... President Pervez Musharraf ceded power to a civilian government in early 2008. In the wake of his resignation the new civilian government appears likely to amend the constitution once again to limit the powers of the presidency. ... The EIU now categorises Pakistan as a 'hybrid regime' and ranks it 108 (of 167) on its democracy index." The EIU adds: "pervasive official corruption and increasingly frequent terrorist attacks" act as a disincentive to foreign investors. Additional governance indicators from the World Bank are reported on Table 2.

- Compute continuously-compounded annual growth rates of GDP per worker for Pakistan and India for the period 1990-2010. Which is higher? (10 points)
- Identify the sources of growth in Pakistan over the same period. (This is an indication that you should do the usual growth accounting calculations.)

Why has growth been so slow? (15 points)

- (c) Use the information provided to assess Pakistan's prospects. Do you see it growing like India or more slowly? Why? (10 points)

2. *Foxconn's next frontier.* Hon Hai Precision Industry Co. Ltd. ("Foxconn") is a Taiwan-based manufacturer that makes products for Apple, Intel, Sony, and others. Known for its plants in China, including one in Shenzhen that makes iPads, it also has operations in Brazil, Malaysia, Mexico, and other locations.

With wages rising rapidly in China, Foxconn is exploring other locations. As a private consultant, you have been asked to write a short report outlining the advantages and disadvantages of locating in Thailand and Vietnam and to compare both to China. You collect the information in Table 3 and begin your report.

Indicator	China	Thailand	Vietnam
<i>General</i>			
GDP per capita (2005 USD)	8400	9200	3500
Doing Business overall (percentile)	50.8	90.3	46.5
World Economic Forum overall (percentile)	80.0	73.6	47.9
<i>Governance</i>			
Political stability (percentile)	25.0	16.5	52.8
Govt effectiveness (percentile)	60.7	59.7	45.0
Regulatory quality	45.5	56.4	29.4
Rule of law	41.8	48.8	39.9
Control of corruption (percentile)	30.3	43.6	33.6
<i>Labor</i>			
Minimum wage (USD per month)	204	118	65
Severance after 10 years (weeks of pay)	43	50	43
Labor market efficiency (percentile)	71.5	47.2	64.6
Literacy (percent of adults)	94	94	93
Years of school (adults)	8.2	7.5	6.4
<i>Infrastructure and trade</i>			
Infrastructure quality (percentile)	66.7	68.1	34.0
Export documents required (number)	8	5	6
Export delay (days)	21	14	21
Export cost (USD per container)	580	585	610

Table 3: Institutional indicators for China, Thailand, and Vietnam. Percentiles range from 0 (worst) to 100 (best). Sources: Penn World Table, World Economic Forum, World Bank, Doing Business.

- (a) Which of these indicators are most important to your venture? How do the two countries compare on them? (10 points)

- (b) Which country or countries would you recommend to your clients? What are the primary challenges they would face? (10 points)

3. *Short questions.*

- (a) XYZZY Partners offers business consulting services worldwide from its US headquarters. In 2012, sales were 235 (million dollars), of which 60 came from clients in other countries. Expenses included labor compensation of 150, rent of 35, and materials of 25. Any surplus goes to the firm's partners. They also purchased enterprise resource management software from German software giant SAP for 85, which they will treat as a capital expenditure and amortize over ten years.
What was the firm's contribution to US GDP? (10 points)
- (b) In Ricardo's model, what is the impact of trade on jobs? (10 points)
- (c) When an unemployed person stops looking for work, what happens to the unemployment rate? The employment rate? The labor force? (10 points)
- (d) Consider the statement: "In financial markets it's important to protect lenders. Otherwise, both borrowers and lenders lose." Do you agree or disagree? Why? (10 points)
- (e) Consider the statement: "It's not necessary for a country to save in a global economy. Firms can finance all the investment they want in global capital markets." Do you agree or disagree? Why? (10 points)