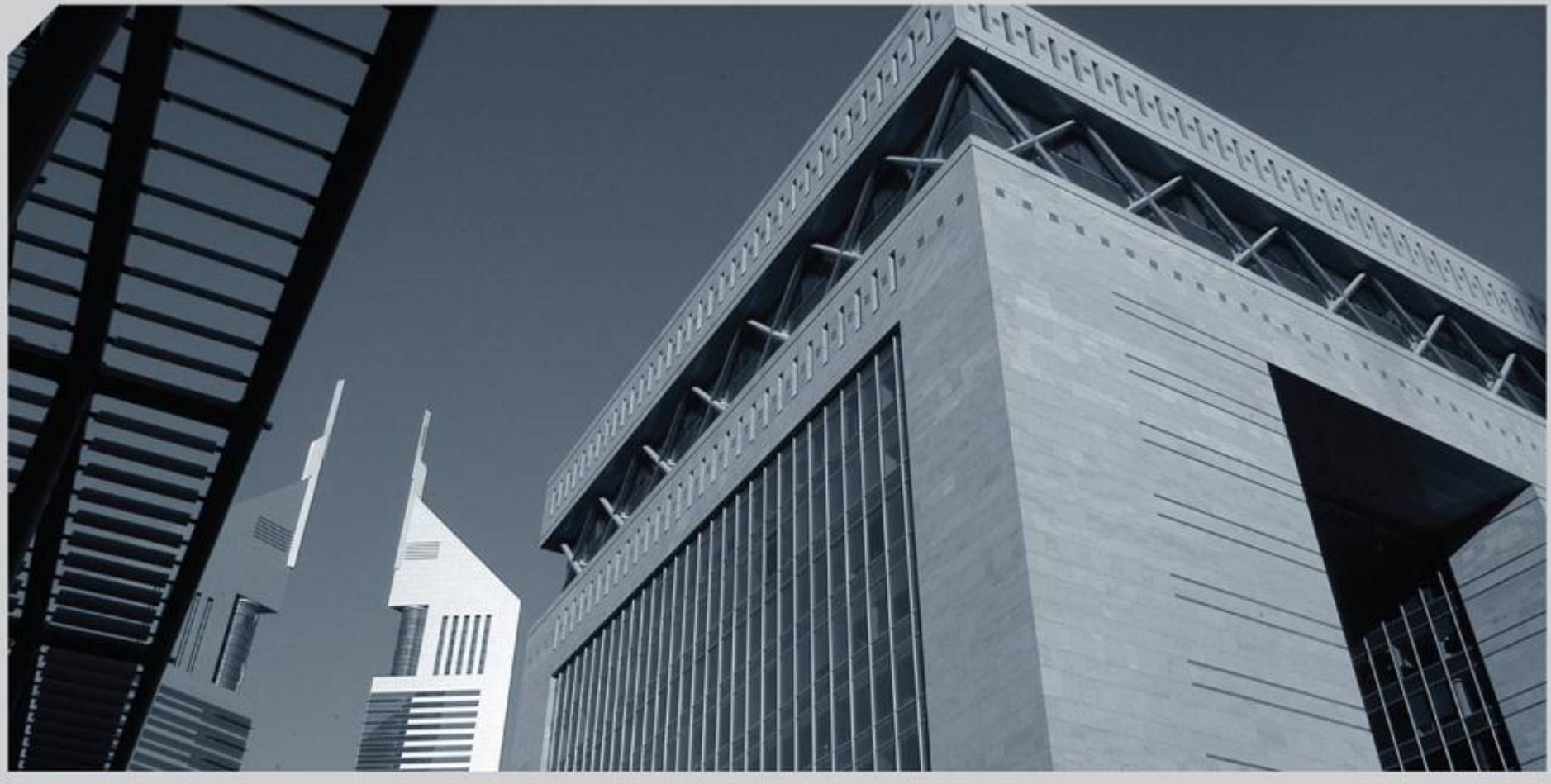


Building Infrastructure for Future Generations in MENA

Integrating MENA Into Emerging Global Supply Chains: Building on Dubai's Infrastructure and Logistics

Dr. Nasser Saidi, Chief Economist, DIFC

27th March, 2012

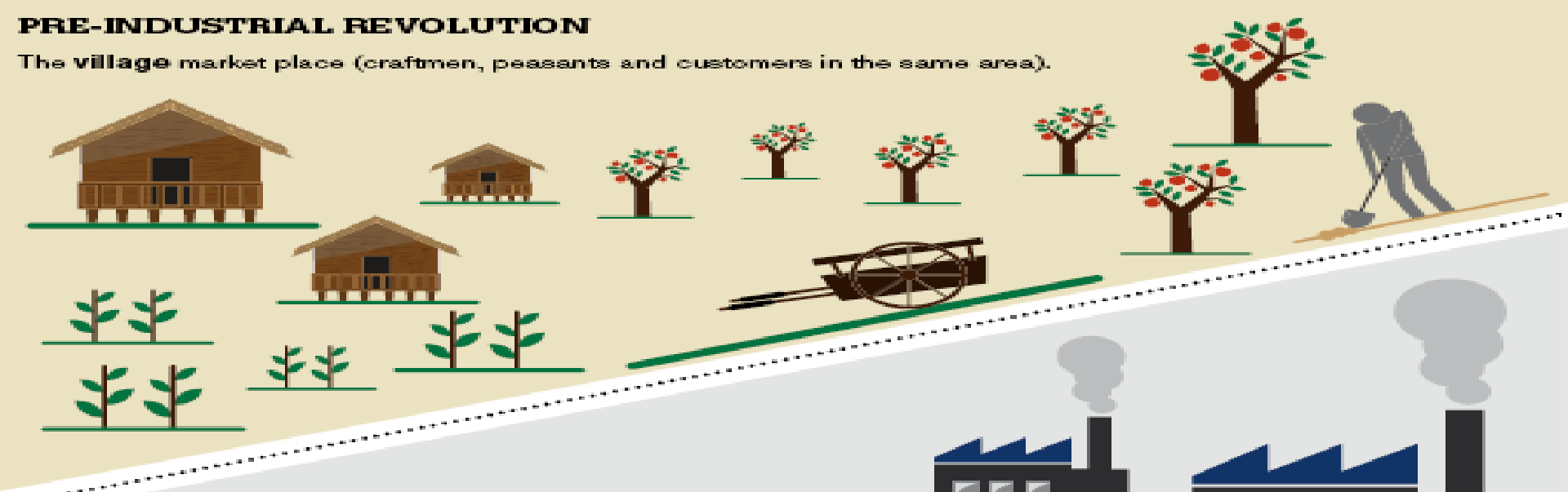
DIFC Dubai International Financial Centre

Agenda

- Infrastructure, Economic Growth & Transformations
- UAE’s Strong Linkages: Lessons For MENA
- Why is Infrastructure Investment Imperative?
- Infrastructure Requirements & Job Creation
- Why Is Regional Integration Essential?
- Structural Priorities Moving Forward

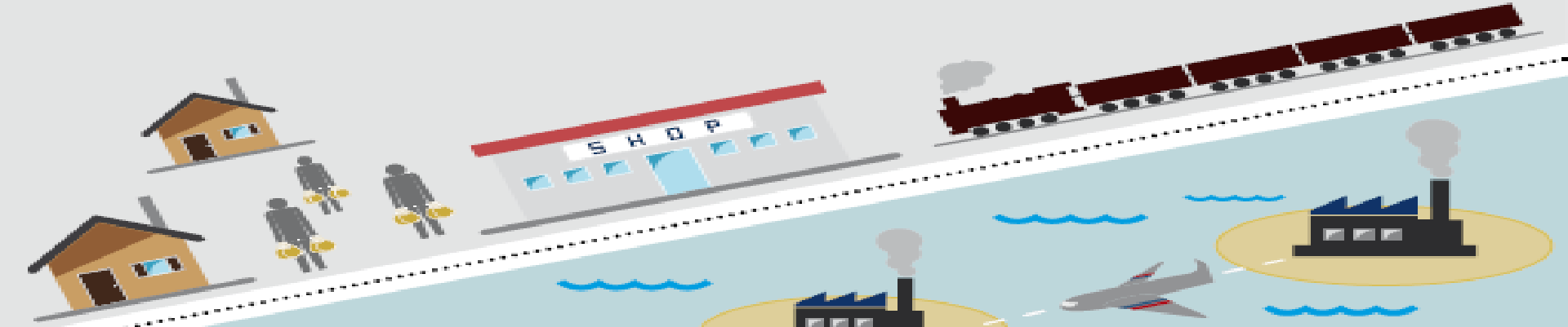
PRE-INDUSTRIAL REVOLUTION

The **village** market place (craftmen, peasants and customers in the same area).



INDUSTRIAL REVOLUTION

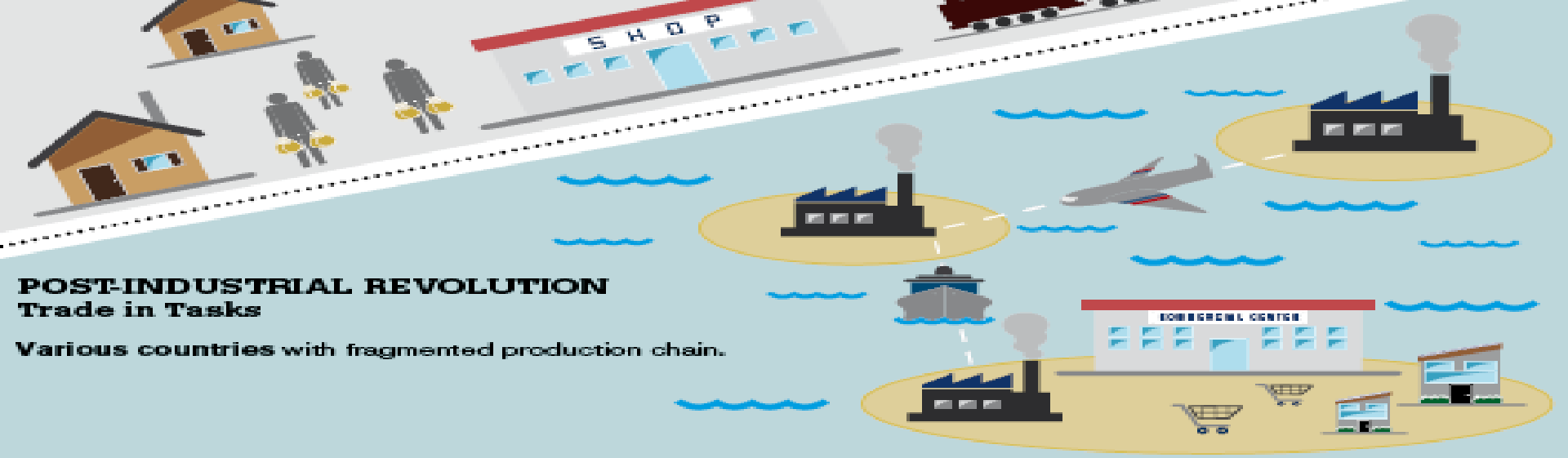
Same country but industrial production distant from consumers.



POST-INDUSTRIAL REVOLUTION

Trade in Tasks

Various countries with fragmented production chain.



Infrastructure + Logistics = Transform Economies

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- Strong linkages between Infrastructure and Economic growth is well-documented; Infrastructure is not only a **by-product of growth**, but can be an important **driver** of economic growth & development
- Higher Infrastructure capital = Directly Productive + Increases productivity of private sector capital + Complementarity effects + Network Economies
- Investment in Infrastructure also:
  - **Improves productivity and returns on human capital investments** by improving health, mobility, longevity & quality of human capital
  - **Improves international competitiveness**
  - **Protects Environment** through waste management, water, sewage etc. with positive spillover effects on agriculture, tourism & overall quality of life
  - Generates **Network Economies** and Externality effects
  - **Lowers Costs of Adjustment** to structural changes and shocks
- Infrastructure + Logistics= Lower Cost of Doing Business
- Infrastructure + Logistics= Major determinants of Openness and Trade effectiveness

Strong Linkages: Infrastructure and Growth

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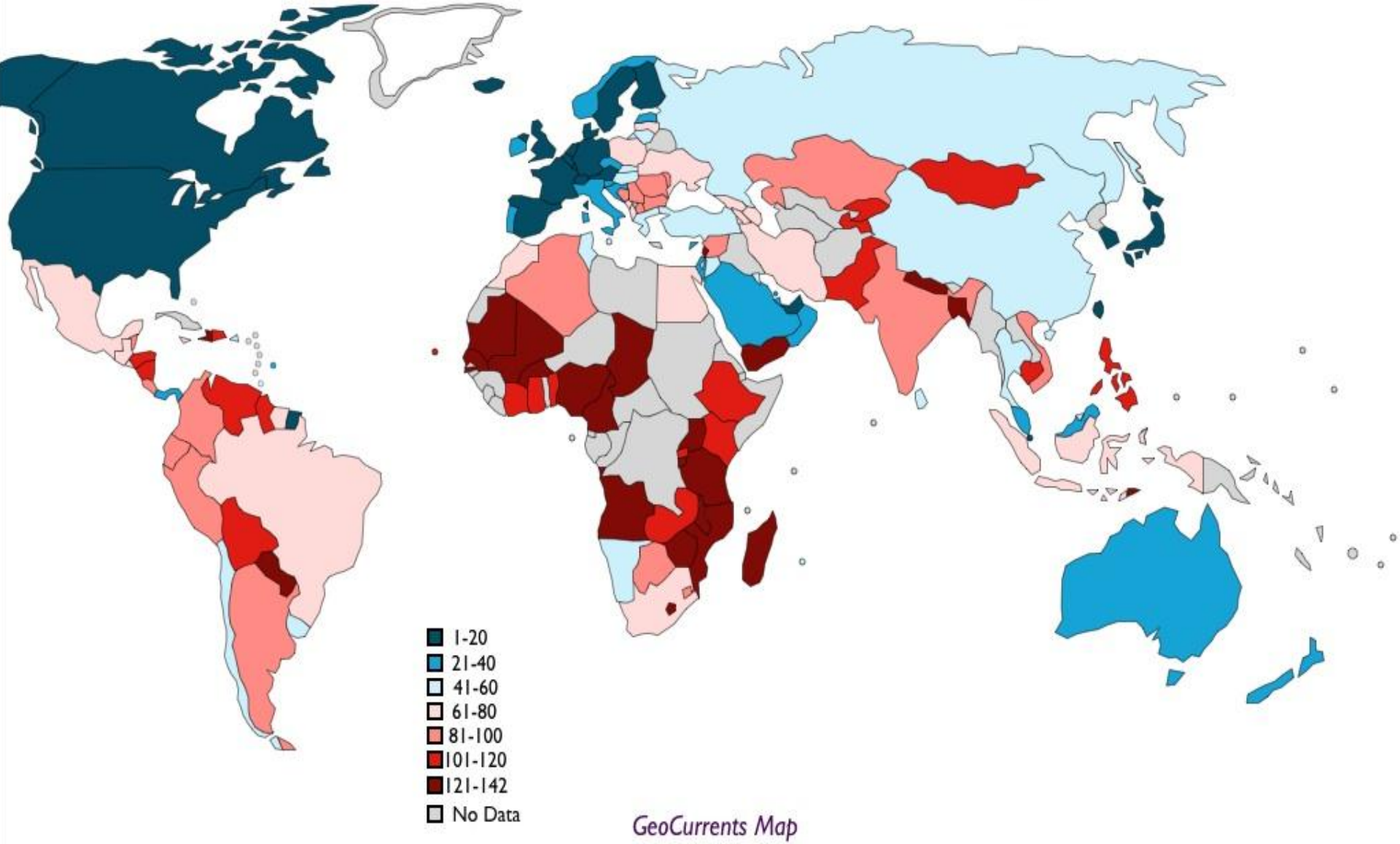
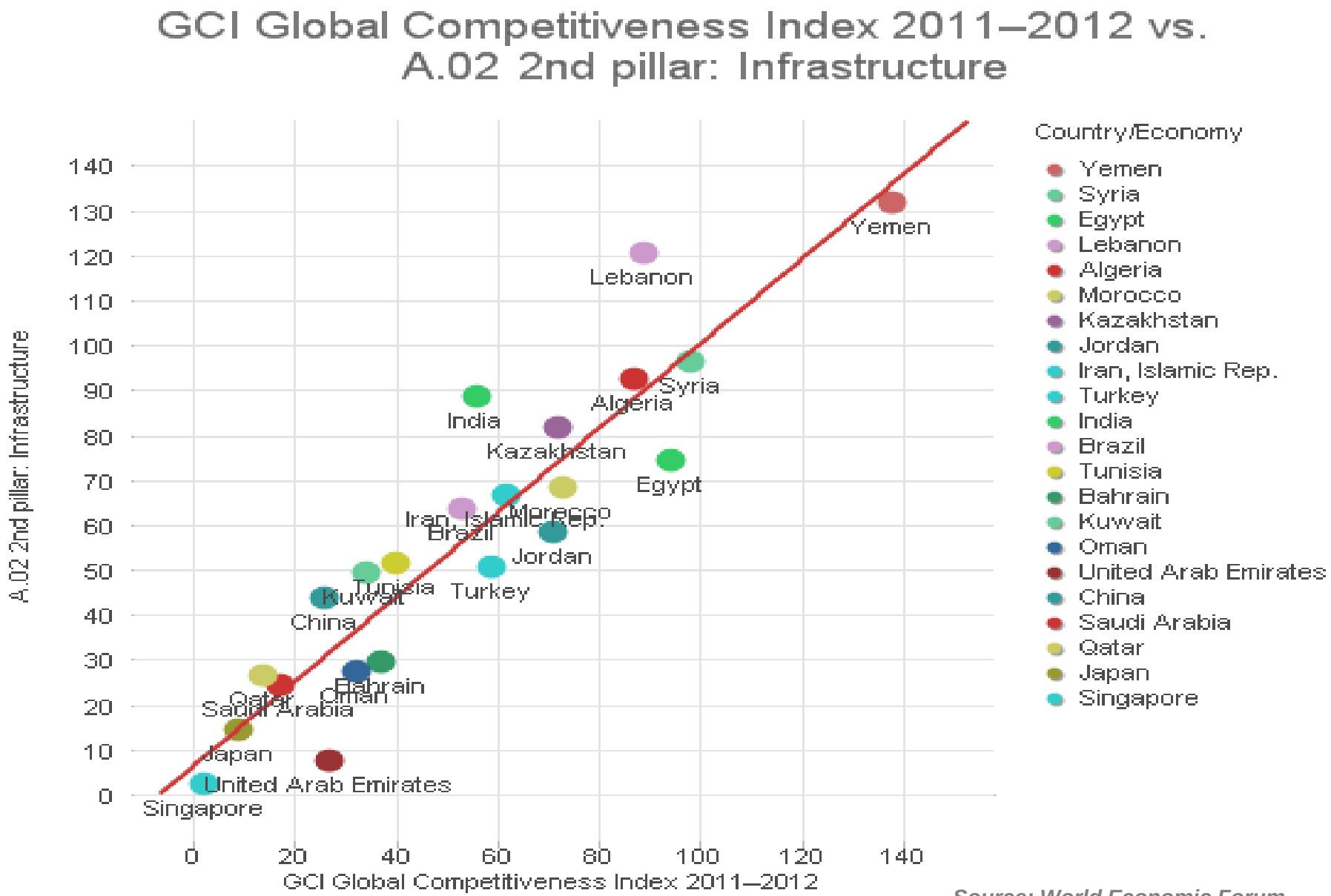
- In **developing countries**, annual growth increased by 1.6% in 1991-95 and 2000-05 as a result of infrastructure investments:
- Aggregate Chinese real income was 6% higher in 2007 than it would have been without National Expressway Network
- Strong empirical evidence that infrastructure enhances economic growth particularly ***if investments complete a network that is already sufficiently developed***
- Infrastructure development can be a "**Growth-Lifting Strategy**"
- **Link to health & education:** construction of all-weather roads in Morocco increased **school attendance** by girls from 28% to 68% between 1985 and 1995, as the improvements in roads significantly freed women's time. It also improved health indicators as the number of **visits to hospitals** and health centres doubled during this time period (World Bank 1996).

World Economic Forum's
Global Infrastructure Rankings



Data Source: http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf

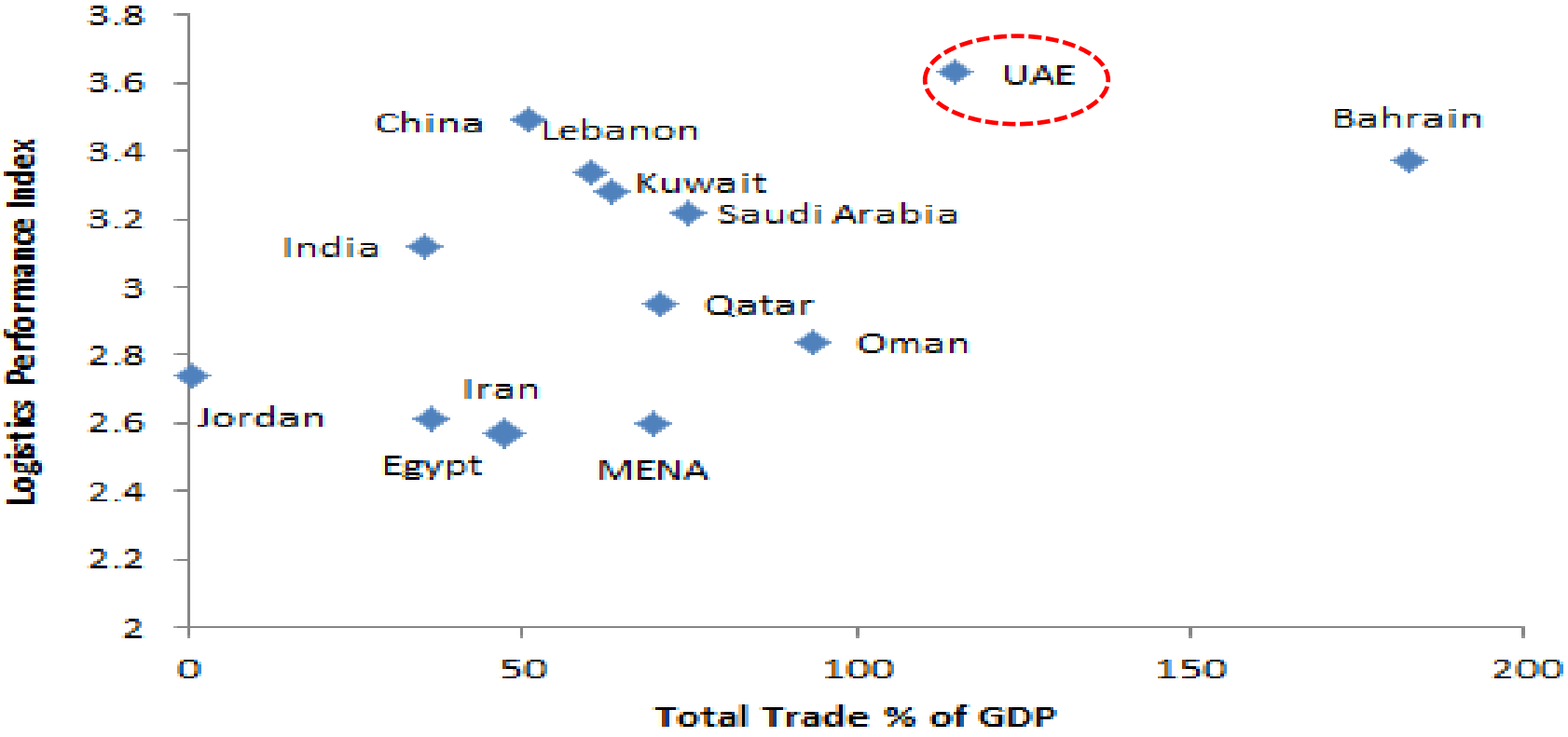
Infrastructure is a determinant of Competitiveness



Source: World Economic Forum

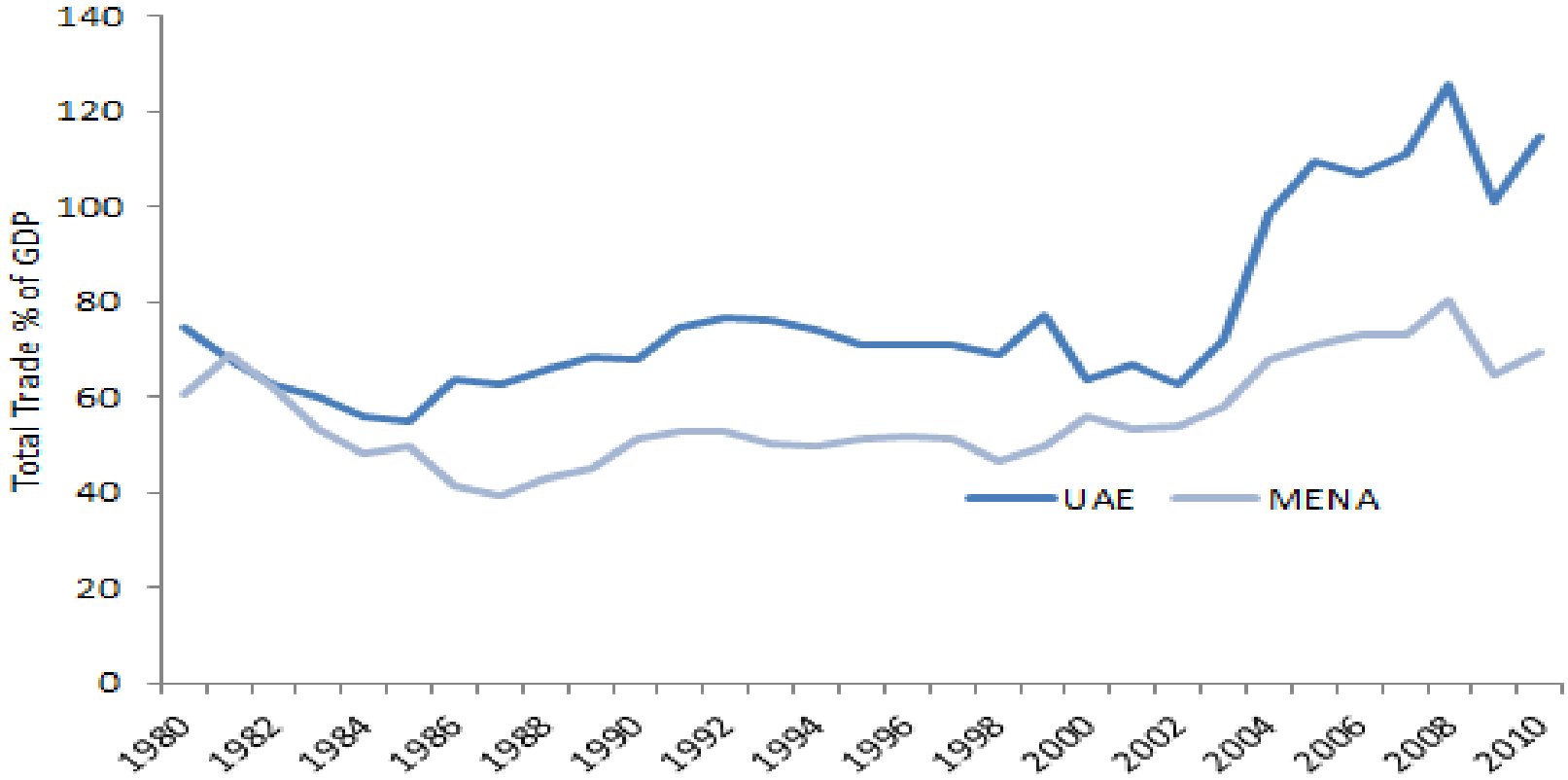
Logistics and Trade

- Presence of a strong logistics sector provides an impetus to trade growth
- Having well-functioning airports & ports, that have a widespread network (with increasing links to EMEs) have worked to UAE's benefit
- UAE stands out – ranks higher than others in the LPI & has a high trade-to-GDP ratio



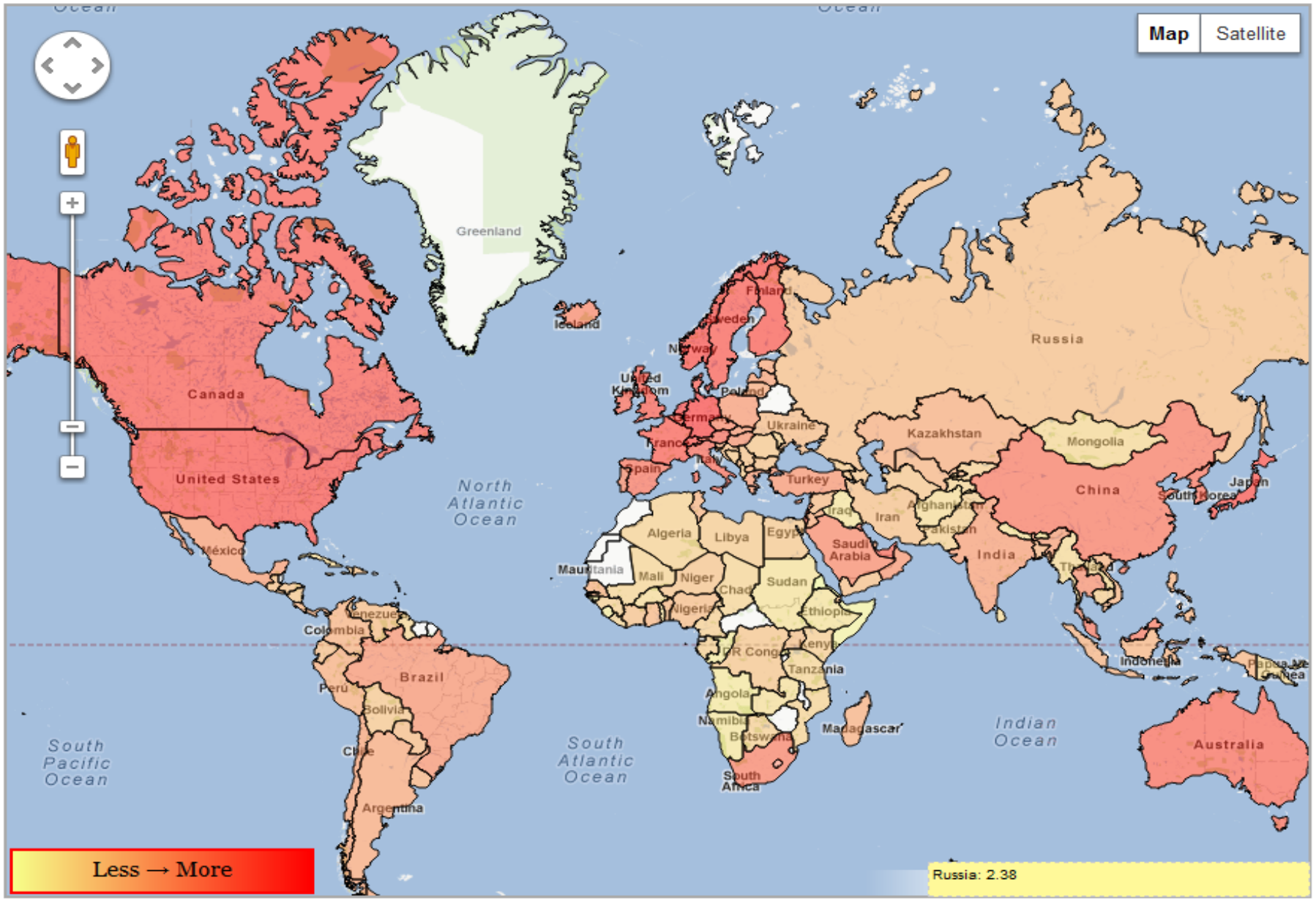
UAE has outperformed MENA

- UAE's **share of trade** has increased much faster when compared to the MENA region
- UAE's Trade/GDP ratio was about 105% in 2011 – **Dubai accounts for bulk of UAE's trade** (66%)
- Dubai/ UAE continues to strengthen its position as a global trading hub with **increasing links to the EMEs** especially India/ China/ Africa.



Source: IMF DOTS, World Bank LPI

Infrastructure Ranking – WB LPI



UAE Ranks High in Logistics Performance Index

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- World Bank's LPI compares trade logistics profiles of 155 countries.
- LPI is directly correlated with sustainable economic growth.
- In 2010, UAE ranked 24th; on top were Germany, Singapore & Sweden.

Country	LPI	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness
Germany	4.11	4.00	4.34	3.66	4.14	4.18	4.48
Singapore	4.09	4.02	4.22	3.86	4.12	4.15	4.23
Sweden	4.08	3.88	4.03	3.83	4.22	4.22	4.32
Japan	3.97	3.79	4.19	3.55	4.00	4.13	4.26
Switzerland	3.97	3.73	4.17	3.32	4.32	4.27	4.20
Luxembourg	3.98	4.04	4.06	3.67	3.67	3.92	4.58
UAE	**3.63**	**3.49**	**3.81**	**3.48**	**3.53**	**3.58**	**3.94**
Bahrain	3.37	3.05	3.36	3.05	3.36	3.63	3.85
Saudi Arabia	3.22	2.91	3.27	2.8	3.33	3.32	3.78
Qatar	2.95	2.25	2.75	2.92	2.57	3.09	4.09

- UAE has **scope for further improvement across LPI categories**

Country	LPI	Customs	Infrastructure	Ease of shipment	Logistics services	Ease of tracking	Timeliness
Index	3.6	3.49	3.81	3.48	3.53	3.58	3.94
Rank	**24**	**21**	**17**	**14**	**27**	**28**	**33**

Source: World Bank LPI (2010)

MENA mainly trades with Asia

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Intra- and inter-regional merchandise trade, 2010 (in USD bn & in percentages)

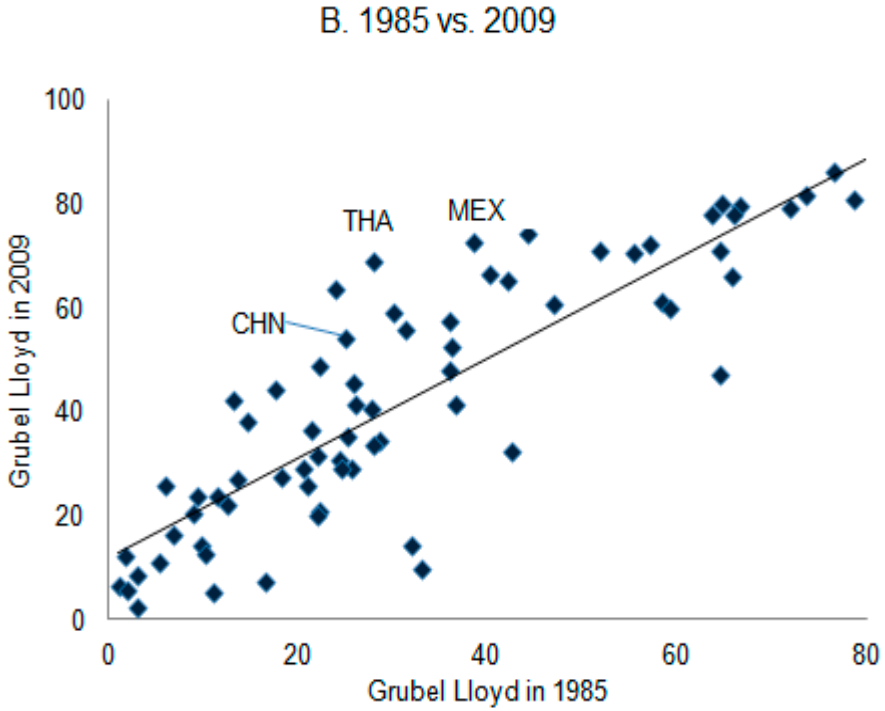
	Destination							
Origin	North America	South and Central America	Europe	CIS	Africa	Middle East	Asia	World
Value								
World	**2508**	**587**	**5844**	**399**	**453**	**561**	**4216**	**14851**
North America	956	165	330	11	32	53	413	1965
South and Central America	138	148	108	8	15	15	134	577
Europe	416	98	3998	180	177	168	524	5632
Commonwealth of Independent States (CIS)	33	6	308	109	9	19	88	588
Africa	85	14	184	2	62	19	123	508
Middle East	79	7	108	5	29	89	471	895
Asia	801	148	808	85	128	198	2464	4686
Share of regional trade flows in each region's total merchandise exports								
World	**16.9**	**4.0**	**39.4**	**2.7**	**3.0**	**3.8**	**28.4**	**100.0**
North America	48.7	8.4	16.8	0.6	1.7	2.7	21.0	100.0
South and Central America	23.9	25.6	18.7	1.3	2.6	2.6	23.2	100.0
Europe	7.4	1.7	71.0	3.2	3.1	3.0	9.3	100.0
Commonwealth of Independent States (CIS)	5.6	1.1	52.4	18.6	1.5	3.3	14.9	100.0
Africa	16.8	2.7	36.2	0.4	12.3	3.7	24.1	100.0
Middle East	8.8	0.8	12.1	0.5	3.2	10.0	52.6	100.0
Asia	17.1	3.2	17.2	1.8	2.7	4.2	52.6	100.0

Source: International Trade Statistics, WTO, 2011

Grubel Lloyd Index: measures intra-industry trade

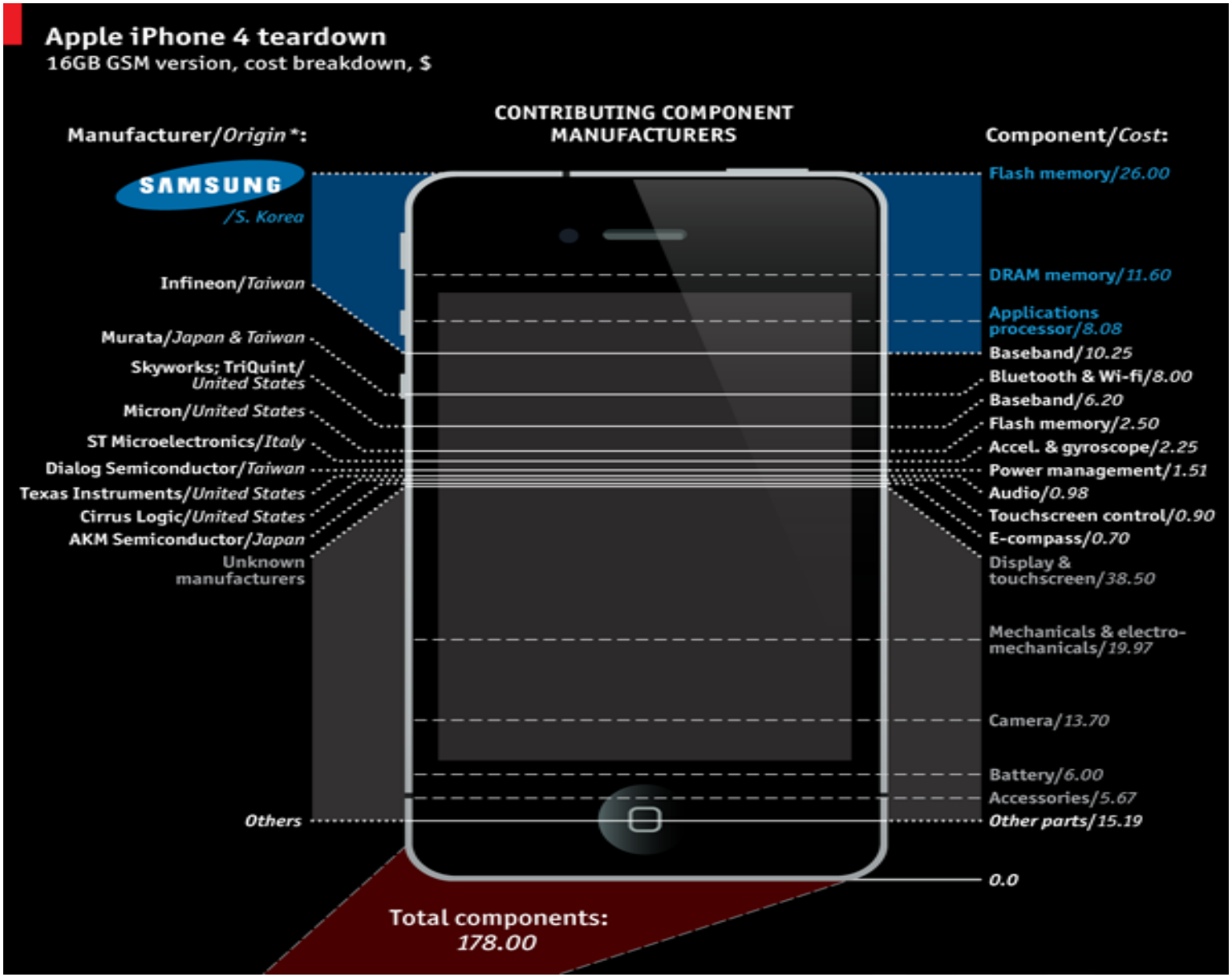
- Western Asia, and most of Africa have not developed much intra-industry trade. This is one of the main distinctions between these two regions & rest of the world.
- Opportunity for Dubai as a trade hub to harness the untapped potential of regional intra-industry and inter-industry trade.

Countries that experienced higher changes in intra-industry trade between 1985 & 2009 are those integrated in a supply chain, such as China, Thailand & Mexico



Source: IMF Working Papers

Global Supply Chains: Apple iPhone



Source: The Economist, "How the iPhone widens the US trade deficit with China", voxeu.org (http://voxeu.org/index.php?q=node/6335)

Why Prioritise MENA Infrastructure Investment? I DIFC

- **Demographics**: Young, fast-growing population + Growing middle class
- **Rapid urbanization**: 3%+ per year; breeding ground for growth of market economy, enterprise localization, talent pooling, clusters of competencies & specialization
- **Enable Economic diversification &** move away from over-dependence on hydrocarbons
- **Shift in global economy & trade patterns towards emerging markets & Asia. MENA countries need to make trade facilitating investments to integrate into new emerging global supply chains, New Silk Road.**
- **Historical Underinvestment** ~ Large Supply Gaps => Public investment spending has been particularly weak in oil importing countries, which have much more limited fiscal space than the oil exporters

Why Prioritise MENA Infrastructure Investment? II

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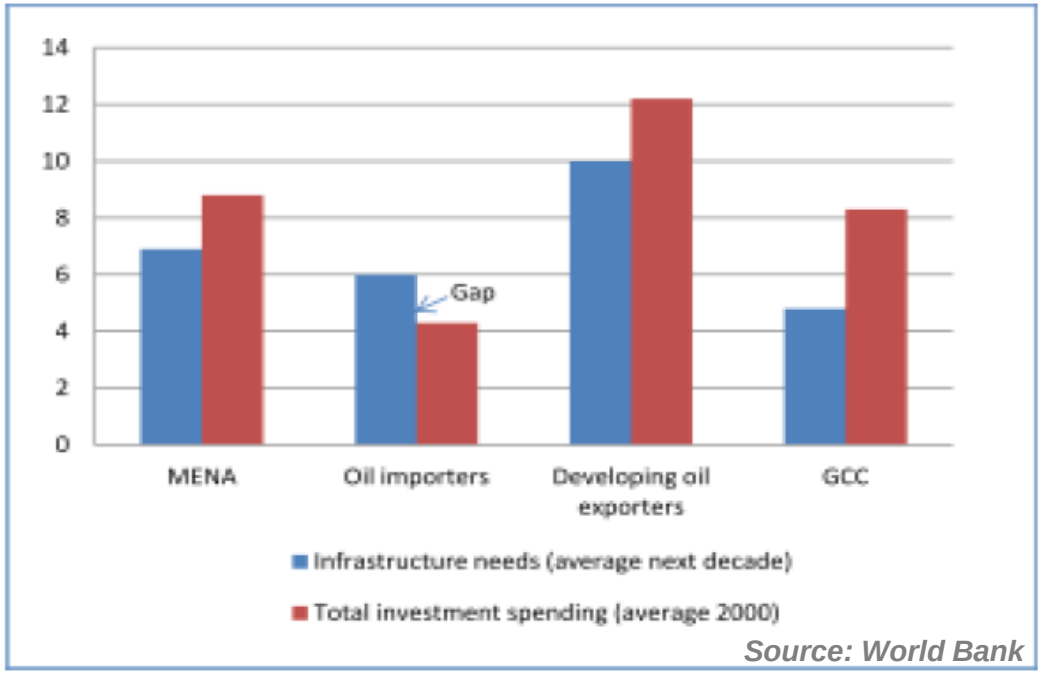
- **Reconstruction of countries that experienced war & violence**: Iraq, Sudan, Libya, Lebanon, Palestine
- **"Arab Spring" countries are going through a transition period** of high unemployment, low investment and low growth
- **Economic and social returns** to infrastructure investments are high => increasingly important drivers of regional growth.
- Infrastructure investments **create jobs in sectors such as construction and manufacturing**, while also enhancing future competitiveness, economic diversification and growth
- Need of the hour: "**growth-lifting**" strategy => could take the form of a **regional infrastructure initiative**

MENA Infrastructure requirements

- Annual infrastructure needs in the range of USD 1250 - 1500bn & a financing gap in the range of USD 175 - 700bn in **developing** nations
- WB estimates **MENA's** infrastructure investment and maintenance needs through 2020 at $**106bn per year** or 6.9% of the annual regional GDP, with a $60bn financing gap .
- Developing oil exporting countries will need to commit about 11% of their GDP annually (USD 48bn) on improving and maintaining their national infrastructure endowments, while the oil importing countries need about 5-6% of their GDP

- Investment and rehabilitation needs are especially high in the **transport sector**, particularly roads, and the electricity sector, jointly accounting for almost half of total needs.
- Fulfilling the **electricity needs** alone would require **3% of the yearly regional GDP**.

Infrastructure Needs & Financing (annual, % of GDP)

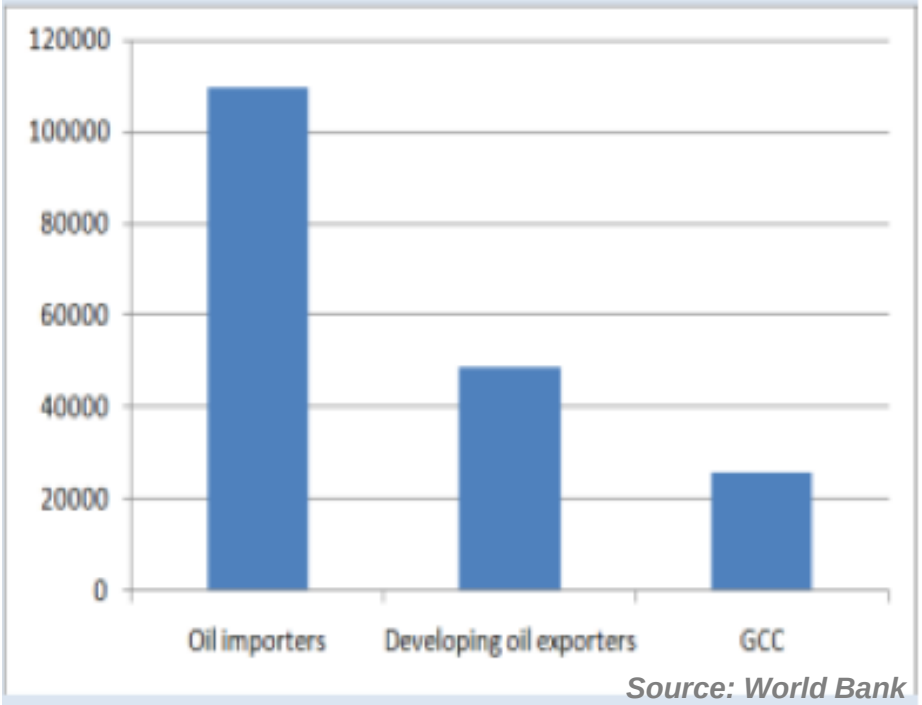


Source: World Bank

MENA Infrastructure & Job Creation

- Infrastructure investment can contribute significantly to MENA job creation
  - Direct impact: jobs created while building infrastructure
  - Indirect impact: infrastructure attracts private investment, leading to more jobs
- In the **short-run**, every USD 1bn invested in infrastructure has the potential of generating, on average, around 110k infrastructure-related jobs in the oil-importing countries, 26k jobs in the GCC, and 49k jobs in the developing oil-exporting countries
- **Long-term** employment effect of infrastructure investment could be significant.
- A WB report finds that the employment response induced by infrastructure investment results in **1ppt additional growth** = roughly 9mn additional jobs in the course of ten years in MENA, or a little less than 1mn jobs per year (~ 30% of the jobs created in the region during the 2000s).

Infrastructure Related Job Creation (per US$1 bn)



Source: World Bank

Infrastructure Financing

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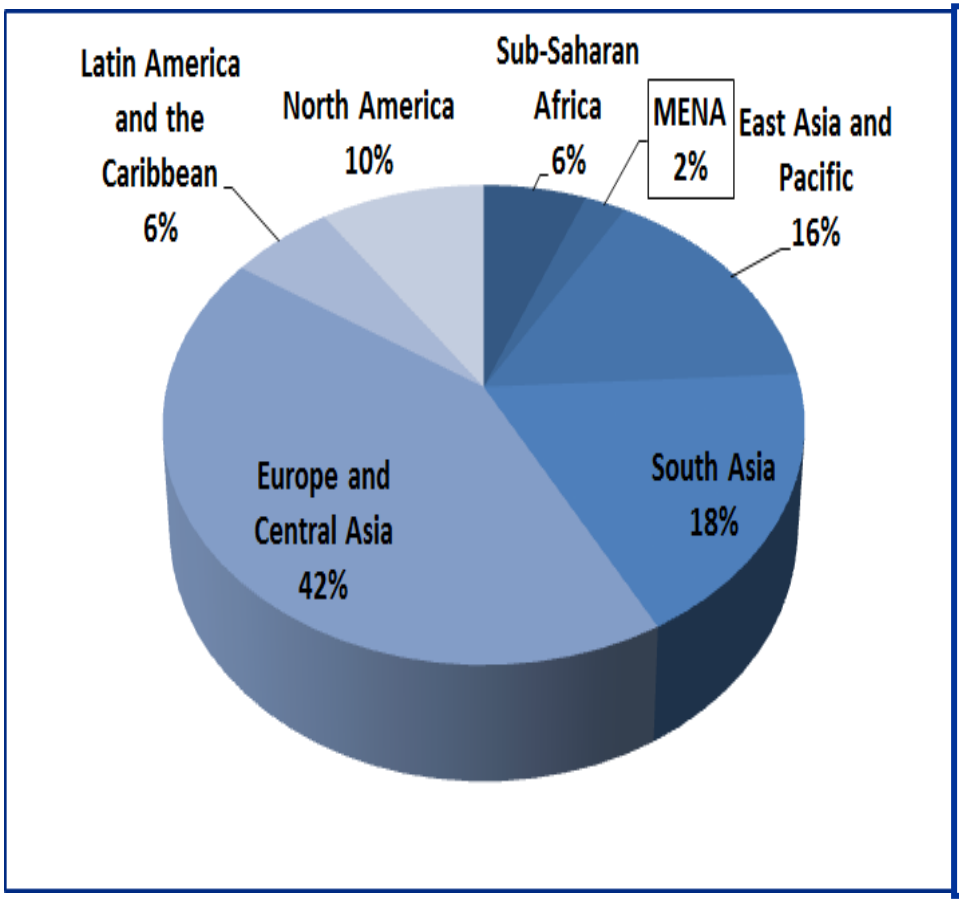
- Infrastructure investment is capital intensive, requires long gestation, has public goods dimension, with revenue generation subject to policy uncertainty => Higher risk
- Hence, bulk of financing has traditionally come from government or SOEs such as public utilities.
- **MENA has Underinvested in Infrastructure: What is required?**
  - **Shift to Market Finance:** Develop local currency bond markets; housing finance
  - **Shift to Private Sector** via Privatisation and PPP projects: need to develop PPP framework of laws, regulations & regulatory agencies
  - **Shift to Institutional Investors:** SWFs investing in infrastructure has risen from 47% in 2010 to 61% in 2011 (Preqin)
- **A GCC-led MENA organization should be given the mandate to undertake regional projects**
- **<u>Conditions propitious for an Arab Bank for Reconstruction & Development</u>**

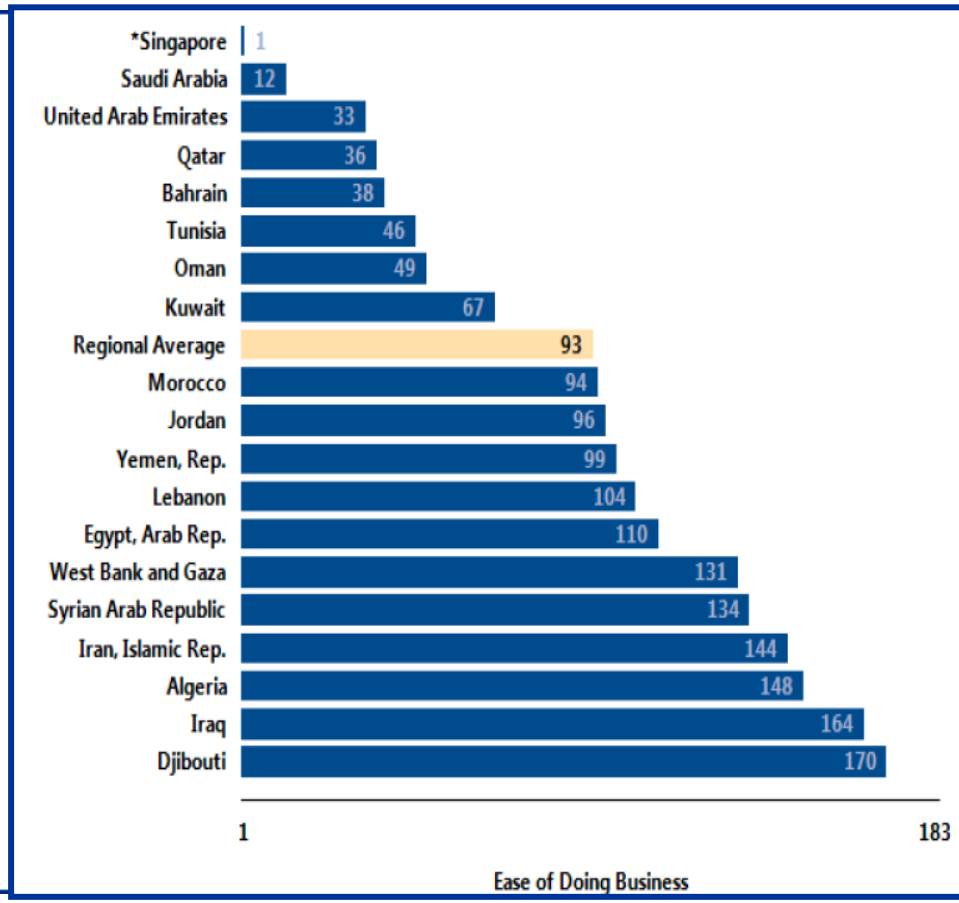
Public-Private Partnerships (PPP)

- Middle East has the lowest number of PPP units compared to other regions (LHS)
- Absence of an existing framework for PPP is an impediment
- One of the challenges is that investment climate remains weak –Doing Business 2012 rankings remain low for most MENA countries

Share of PPP Projects



Ease of doing Business



Source: World Bank

Why Regional Infrastructure Integration?

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- **Improve regional connectivity** by making it faster, cheaper, and easier for people and goods to move across borders within the region;
- **Reduce the cost of regional (and global) trade**, enhance the competitiveness of regional production networks, and promote greater investment;
- **Promote greater regional (and global) integration**, and thus faster economic growth;
- **Help reduce poverty** by improving poor people's access to economic opportunities, lowering the cost of the goods and services that they consume, and providing better access to core infrastructure services, such as electricity;
- **Help narrow the development gap among Arab economies** by providing small, poor, and remote countries and areas with better access to wider regional (and global) markets and production networks, thereby stimulating investment, trade, and economic growth in those areas;
- **Promote more efficient use of regional resources,** by developing regional projects that permit regional environment friendly energy trade such as in gas and solar or hydropower;
- **Ensure inclusive and environmentally sustainable economic growth**
- **Help create a single GCC and Arab market**

Untapped Potential of MENA Regional Integration

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- Geography & proximity, density & intensity of traffic = **high returns to integrated infrastructure investments**
- Regional Integration: (a) Leverage assets for the region's countries & (b) integrate economies of the region into new, emerging global supply chains
- For the MENA region and particularly for GCC, the lessons are very clear - greater **regional economic integration** requires:
  - **Investment in Regional Infrastructure**:
    - **Transport:** rail, road, air
    - **Energy**: oil & gas pipelines, electricity
    - **Telecommunications & Infostructure** (broadband+)
    - **Payment Networks**: facilitate trade & markets payments & settlements
    - **Financial Market Infrastructure**: integrated capital markets
  - **Regional cooperation** on trade facilitation, streamlining & simplifying international trade procedures, customs and standards
- **Greater Regional Economic Integration / Network Economies:** Strategic & Economic interest of the GCC to invest in infrastructure & integrate non-GCC countries into its soft & hard infrastructure

Regional Infrastructure Integration Projects

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- Overall, **transport systems are well developed** in the GCC countries, with good road networks and modern facilities for air, sea, and land transport
- Current efforts to integrate infrastructure in **power, gas, and railway sectors**
- **Power**: GCC countries have nearly completed the **interconnection of electricity grids**, which will allow electricity exchange among all six member states. Feasibility undertaken to assess connecting Yemen with Saudi Arabia.
- **Oil & Gas**: Potential for **cross-border oil & gas pipelines -** Establishing alternative oil export routes would diversify energy export capacity of Gulf oil exporters & end reliance on the single route of the Straits of Hormuz => strengthen confidence of the oil market, lessen sensitivity of the market to security and political developments
- **Railways**: **GCC Rail Project –** The total value of railway projects (rail, metro, tram, and stations) is estimated to be around $100+ billion between 2011 and 2020.
- **But, future integration needs to happen with rest of the MENA countries + Central Asia**

Financial Markets Integration

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- The GCC's financial sector is **dominated by banking**, with relatively high concentration among domestic players. **Largest five banks are domestic and account for 50-80% of total banking sector assets**.
- In the MENA region debt securities markets (~10%) are overshadowed by bank credit and, to a lesser extent, equities.
- Eurozone crisis and Basel III regulatory requirements will put severe constraints on bank financing of infrastructure finance=> Strong incentives to develop **Local Currency Bond/ Sukuk markets**
- Financial markets vary in regulatory regimes & in the level of openness to foreign participation. Rules and regulations differ with regard to reserve requirements, open foreign exchange positions, payment of dividends and remittance of profits, controls on lending to non-residents, and foreign borrowing by individual banks.
- Need to **integrate financial markets** in the region, starting with the UAE

Structural Priorities Moving Forward

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Region needs to **change the infrastructure development & investment model**

(a) **Increase private sector involvement** – through PPP, privatisation and other direct investment: Need to resolve issues in legal framework, ownership issues & others

(b) Grow **Region's financial markets to finance reconstruction & Infrastructure**

- Governments need to move away from using current revenues to finance infrastructure
- Develop Local Bond & Sukuk Markets to finance Infrastructure

(c) Integration of Regional Infrastructure: benefit from network externalities + lower maintenance costs

- Focus on regional integration of infrastructure **in** UAE in view of GCC linkages
- GCC + other MENA countries, including North African countries: transport, electrification, pipelines, solar/renewable energy (Desertec)
- Integration of infrastructure with Central Asia/New Silk Road

(d) **Establish an Arab Bank for Reconstruction & Development**

Thank You!

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