The UAE's competitiveness strategy

The use of international benchmarks to guide policy

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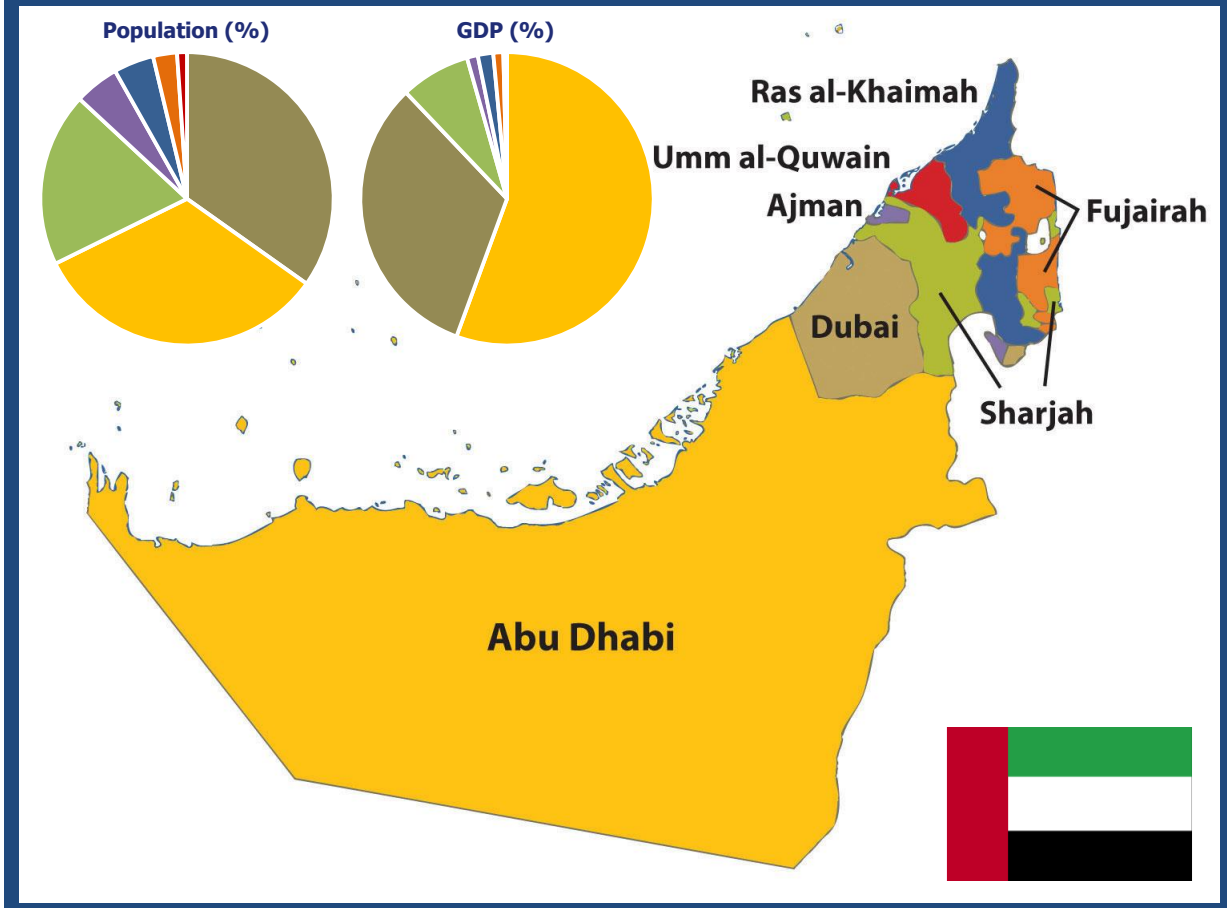
KAZAKHSTAN GROWTH FORUM

The UAE is a federation of 7 emirates

Abu Dhabi (capital) and Dubai (biz hub) are the preeminent emirates/cities



- **Name:** United Arab Emirates (UAE) – ISO3: "ARE"
- **Gvt type:** Federation of 7 emirates; absolute rule
- **Population:** 9.3 million
- **GDP (BN):** $325; $670 (PPP)
- **GDP/cap:** $35k; $72k (PPP)
- **Capital:** Abu Dhabi
- **Largest city:** Dubai (3.2m)
- **Life expectancy:** 76.8 yrs
- **Land area:** 83,600 km^2
- **Founding date:** 02/12/1971
- **Legal system:** Mixed system of Islamic and civil laws
- **Expat population:** 88%
- **Literacy rate:** 94%
- **Oil share of GDP:** 25%
- **External debt (BN):** $172
- **Lang:** Arabic, English

- **Exports:** $324 BN: Japan (14.8%), Iran (11.4%), India (9.6%), Korea (5.7%), China (5.5%), Singapore (5.4%), Thailand (4.5%)
- **Imports:** $248 BN: China (15.7%), India (13.4%), USA (8.9%), Germany (5.3%), Japan (4.2%)

Data retrieved on 09 Aug 2016; with the exception of trade data extracted 16 Nov 2015 (except Japan imports)

Sources: CIA Factbook, IMF WEO, National Bureau of Statistics (NBS), Observatory of Economic Complexity (MIT) , UN, WB Database, WHO

Local rulers form the highest level of government

Executive branch led by sheikhs from Abu Dhabi (president) and Dubai (PM)

UAE government

1. Federal Supreme Council

4. Federal National Council

5. Federal Judicial Authority

Executive branch

- **Head of state:** H.H. President *Sheikh Khalifa bin Zayed Al-Nahyan* (ruler of Abu Dhabi)

- **Head of government:** H.H. Prime Minister and Vice President *Sheikh Mohammed bin Rashid Al-Maktoum* (ruler of Dubai)

2. President and vice-president

- **Cabinet:** Council of Ministers (appointed by the president) – currently with 25 members (5 female; 20 male)

3. Cabinet

Legislative branch

- **Federal National Council (FNC):** Unicameral body with 40 representatives (20 appointed by the rulers of the 7 emirates) – currently with 9 female members
  Appointed: 8 female; 12 male
  Elected (advisory): 1 female; 19 male
- **Seat distribution:** Abu Dhabi (8), Dubai (8), Sharjah (6), RAK (6), Ajman (4), Umm Al Quwain (4), Fujairah (4)

Judicial branch

- **Highest court:** Federal Supreme Court (court president + 4 judges) – Dubai and RAK courts not subject to the federal Supreme Court
- **Lower courts:** Federal Court of Cassation; federal level courts of first instance and appeals courts; emirate-level court systems (outside of federal mandate)

It is the Arab World's leading nation

It bridges East and West, as well as being a gateway to the MENA region

The UAE is a prosperous nation, led by its two premier cities Abu Dhabi and Dubai.

WEF GLOBAL COMPETITIVENESS INDEX	
2004-05	2015-16
• Finland • USA • Sweden • Taiwan • Denmark • Norway • Singapore • Switzerland • Japan • Iceland • **UAE (16)**	• Switzerland • Singapore • USA • Germany • Netherlands • Japan • Hong Kong • Finland • Sweden • UK • **UAE (15)**

WORLD CITY (GaWC) CLASSIFICATION (2012)	
Alpha++	• London • New York
Alpha+	• Hong Kong • Paris • Singapore • Shanghai • Tokyo • Beijing • Sydney • **Dubai**

Sources: GaWC, WEF.

But take a step back…

The UAE is in the heart of the MENA region (Middle East & North Africa)

- Women in Saudi Arabia cannot drive
- Syria is in a civil war
- Proxy war in Yemen

- Iraq is a failed state
- Egypt experienced a military coup
- Turkey is creeping towards a dictatorship

Yet somehow over there…

A nation has emerged with a diverse and tolerant population

But it was not always this way

In fact, the UAE was only established in 1971

Although present-day UAE has been inhabited since around 1095 AD, the UAE was established only in 1971, led by the leadership of Sheikh Zayed bin Sultan Al Nahyan. By 1975 its population was still less than 500k and did not surpass 3m until after the current ruler of Dubai took power in 2006.

Full title: H.E. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE, and ruler of Dubai

Transformation was meteoric

The UAE used its oil surplus to develop large-scale infrastructure projects

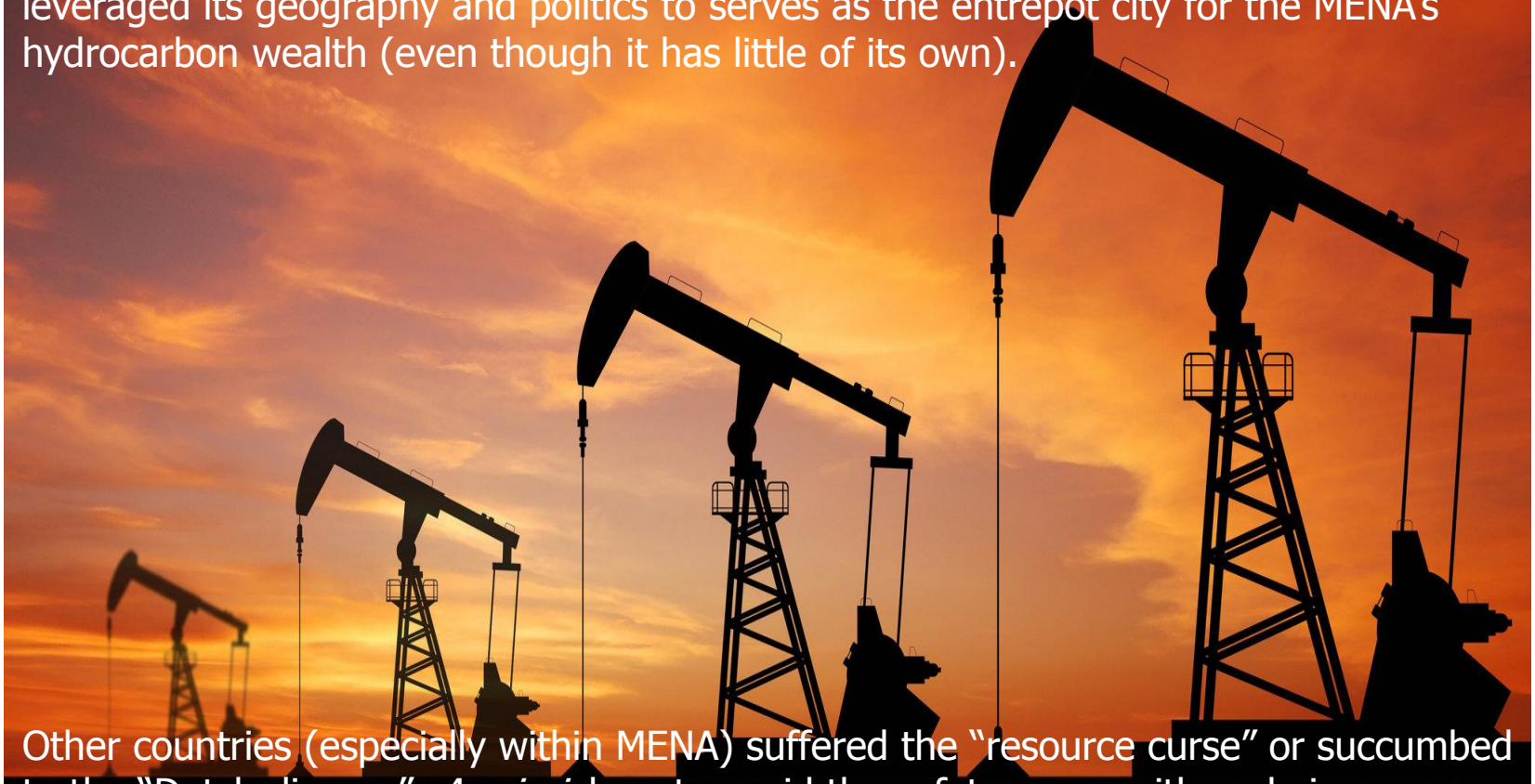
With (immense) hydrocarbon wealth limited to Abu Dhabi, the fate of the union was uncertain. Yet, what Dubai lacked in oil riches it made up in ambition. It became the gateway city for MENA and welcomed the world with open arms becoming the Arab World's (first and only) global city.

"Prediction is very difficult, especially about the future."
Neils Bohr (1922 physics Nobel laureate)

So how did the UAE manage to achieve this?

Hydrocarbon wealth, though important, is only part of the story

Although abundant in hydrocarbons, its reserves are concentrated in the emirate of Abu Dhabi (where it accounts for half of economic output). Dubai (and the other emirates) was able to develop with only limited natural resources. Instead, Dubai leveraged its geography and politics to serves as the entrepôt city for the MENA's hydrocarbon wealth (even though it has little of its own).



Other countries (especially within MENA) suffered the "resource curse" or succumbed to the "Dutch disease". *A priori*, how to avoid these fates was neither obvious nor easy. It required intelligent policymaking and a respect for good governance.

Sources: Dubai Statistics Centre, National Bureau of Statistics.

The UAE chose a unique development path

It borrowed a page from East Asia and downplayed its hydrocarbon roots

Some of the great development success stories have seen countries ignore the advice of "experts" who pushed countries to pursue growth in areas where they had a *comparative advantage*. (E.g. Korea was advised by IMF/WB to specialise in wigs and ginseng, two sectors for which they had a comparative advantage in the 1950s – at the time its GDP/cap was $100.)

- Abu Dhabi capitalised on its oil wealth, but Dubai had to be bold to be relevant
- Most sane advisers would have advised against most (if not all) of Dubai's hallmarks: Aviation hub/Emirates; tallest building; largest mall; indoor ski resort; man-made islands; etc.
- Dubai chose the HKG/Singapore model
- Limited legacy infrastructure allowed country to leapfrog some traditional steps of development

1. Benchmarking against leading economies

Borrow & localise policies that worked elsewhere (esp. Singapore & HKG)

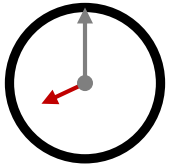
Singapore transformed itself from a poor former British colony into a dynamic global economic powerhouse in just two generations. Like Dubai/UAE, it has large expatriate and Muslim populations, and is a major oil player even w/o it.

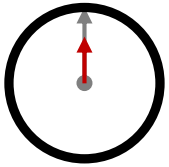
Hong Kong is arguably the freest and most dynamic economy in the world. It is also the gateway to the Chinese market. Both Singapore and Hong Kong are world cities, w/ English an official and working language (a competitive advantage)*

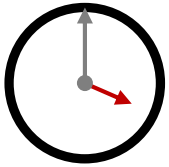
** See Power Language Index (Chan, 2016) – English is ranked 1st, Kazakh is ranked 34th and Russian 5th*

2. Leveraging its strategic location

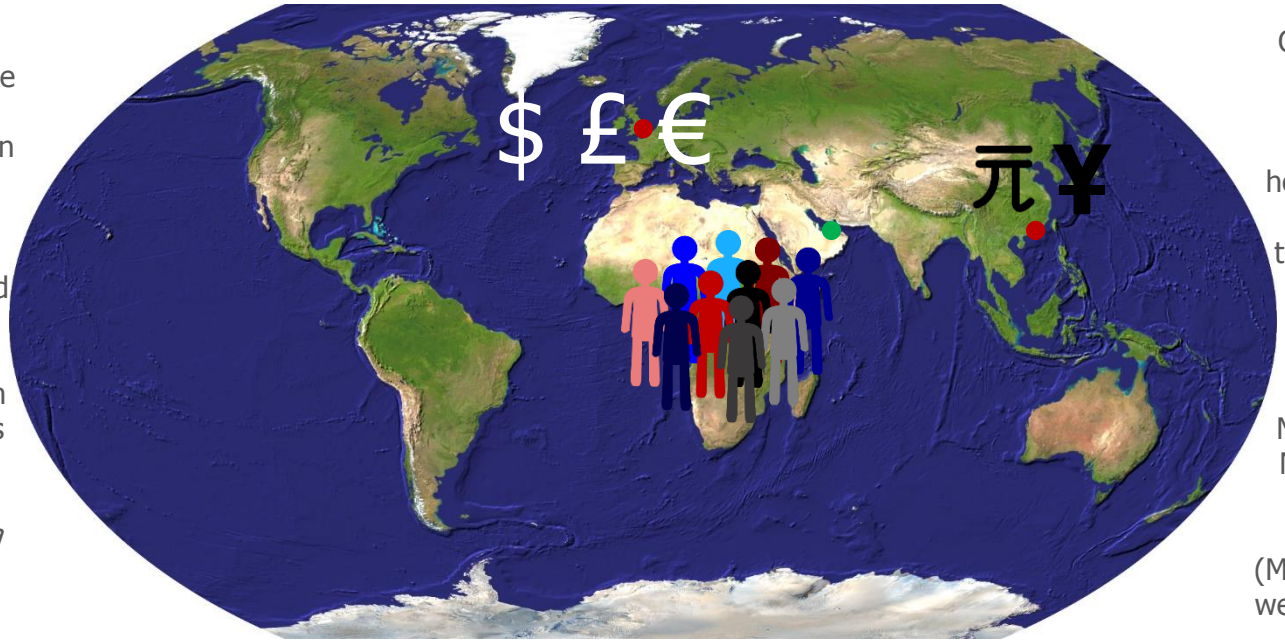
At the crossroad between old & new, and mature & emerging markets







Strategically occupying the middle time zone between London and Hong Kong, UAE lies at the crossroad of Europe, Asia, and Africa. British influence has made **English** the *lingua franca* in the country.



One third of the world's population within a 4-hour flight of UAE; two-thirds within an 8-hour flight. A natural gateway to Middle East, North Africa and South Asia (MENASA), as well as Africa.

3. Connecting to the world

Geography alone is not sufficient without an openness to the world

The UAE lies at the crossroads of Europe, Africa and Asia. Its sea ports connect it to world trade, and its position b/w Europe and Asia makes it a natural aviation hub.

- Jebel Ali Port is the world's 9th busiest container port (TEU); Sharjah hosts strategic bunker services
- DXB is the busiest airport by inter-national passenger traffic and the most connected airport;* AUH has plans to triple capacity by 2030

** From Dubai there are non-stop flights at least three times a week to 93% of global cities outside of its home region.*

4. Channelling petro-$ into long-term prosperity

Convert petro-dollars into real assets

"The Stone Age did not end for lack of stone, and the oil age will end long before the world runs out of oil."
Sheikh Ahmed Zaki Yamani

- ADIA
- ADNOC
- Arabtec
- DP World
- du
- EMAL
- Etisalat
- First Gulf Bank
- Investment Corp. of Dubai
  - Emirates Airline
  - Jumeirah Group
  - Emaar
  - DWTC
  - DUBAL
  - Emirates NBD
  - ENOC
- Masdar City
- Mubadala
  - ATIC
- RAK Ceramics

5. Business-friendly and sociable environment

To attract businesses and talent UAE hanged an "open for business" sign

- Low-tax environment (for businesses and households)
- Fixed exchange rate to USD provides macro stability and confidence to investors (esp. traders)
- Open society (200+ nationalities) with attractive lifestyle
- Widespread use of English and efficient political governance

Bold government policy behind the UAE's ascent

Ambition to make the UAE amongst the world's best nations

The UAE federation allows each emirate to pursue its own development path, but within a national framework – namely the National Agenda (Vision 2021)

The emirates of Abu Dhabi and Dubai ("Abu Dubai") chose complementary development paths. Abu Dhabi is the resource-rich political capital; Dubai is the brash open international city. Their symbiotic relationship allows the country to leverage its wealth to join the global market on terms favourable to them.

The government structure allows for decisive actions that can be swiftly & efficiently executed. Thus political hurdles are not an issue in executing on growth plans.*

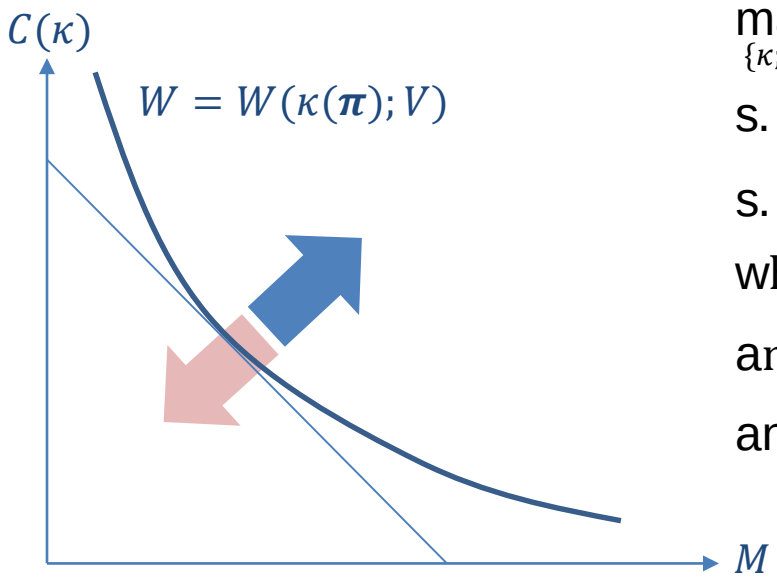
** Thus it is imperative that the leadership have the correct vision/path in mind!*

Government policy as a maxmisation problem

Maximise social welfare choosing policy variables that achieve KPIs

The UAE government places great priority (and its legitimacy of rule) on delivering a high quality of life to its citizens. The UAE government accomplishes this through three primary means:

1. *Placing key performance indicators on government bodies to ensure transparent policymaking that works to improve the country*
2. Attracting expats to the country to help make the country prosperous
3. Creating conditions favourable to its citizens and offering them employment through the public and semi-public sectors



$$\max_{\{\kappa;\pi\}} \boldsymbol{W} = \sum_{i=1}^{N} \omega_i W_i(\boldsymbol{\kappa}; \boldsymbol{V})$$

$$\text{s.t. } \boldsymbol{V} = \sum_{j=1}^{M} \vartheta_j V_j \geq \bar{V} \text{ and } M = min\{\boldsymbol{M}\}$$

$$\text{s.t. } C\big(\kappa(\boldsymbol{\pi})\big) \leq B \text{ and } \kappa_{t|0} \rightarrow \kappa_{t|T}$$

where $W_i'(\boldsymbol{\kappa};\cdot) \geq 0$ and $W_i'(\cdot;\boldsymbol{V}) \geq 0$

and $g(\boldsymbol{\kappa};\cdot) \geq 0$; and $\boldsymbol{\kappa}$ a set of KPIs

and $\kappa = \kappa(\underbrace{\pi_1, \pi_2, \pi_3, \ldots, \pi_L}_{\text{Policy variables}}) = \kappa(\boldsymbol{\pi})$

Competitiveness department to support policies

Competitiveness (benchmarking & KPIs) embedded in government

The PMO sets policy by mandating government departments to enact policies that will be reflected in international reports (e.g. WEF-GCR)

UNITED ARAB EMIRATES
PRIME MINISTER OFFICE

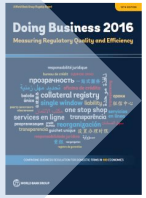
مجلس الإمارات للتنافسية
ecc
Emirates Competitiveness Council

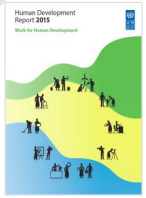
United Arab Emirates

United Arab Emirates

United Arab Emirates

{POLICIES}



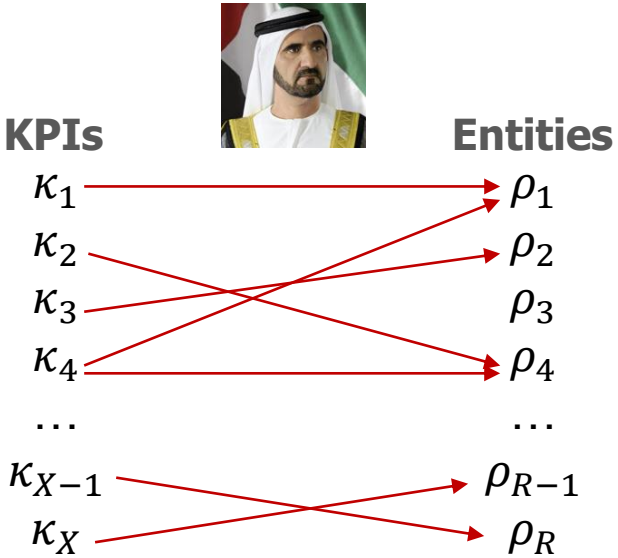


Dedicated gov't unit to drive/manage KPI-driven policies

KPIs assigned to all government entities

They incentive entities to enact policies aligned with development goals

The PMO assigns KPIs (indicators, indices, etc.) to every Ministry/Minister based on 3rd-party metrics – encouragement also in place for the private sector. Quantifiable targets give entities clarity on how to set policies and incentivise parties to enact legislation aligned with the UAE's strategic development goals.



Policies are chosen to achieve KPIs

Policies that target KPIs will improve the competitiveness of country

Policies

- How to choose policies amongst an infinite set of possibilities?

3rd-party KPIs

- Choose policies so as to fulfill 3rd-party KPIs based on international reports (e.g. WB-DBR, WEF-GCR, UNDP-HDR, etc.)

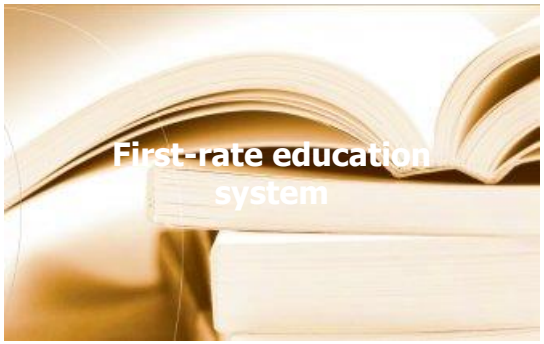
Long-term prosperity

- International reports have inputs that are related to competitiveness; performing well on these indicators means to perform well on competitiveness

Vision 2021: "National Agenda" indicators

The UAE has laid out a clear strategic roadmap for development

رؤيـــة
VISION
2021
الإمارات العربية المتحدة
UNITED ARAB EMIRATES
GOLDEN JUBILEE YEAR 50 عام اليوبيل الذهبي

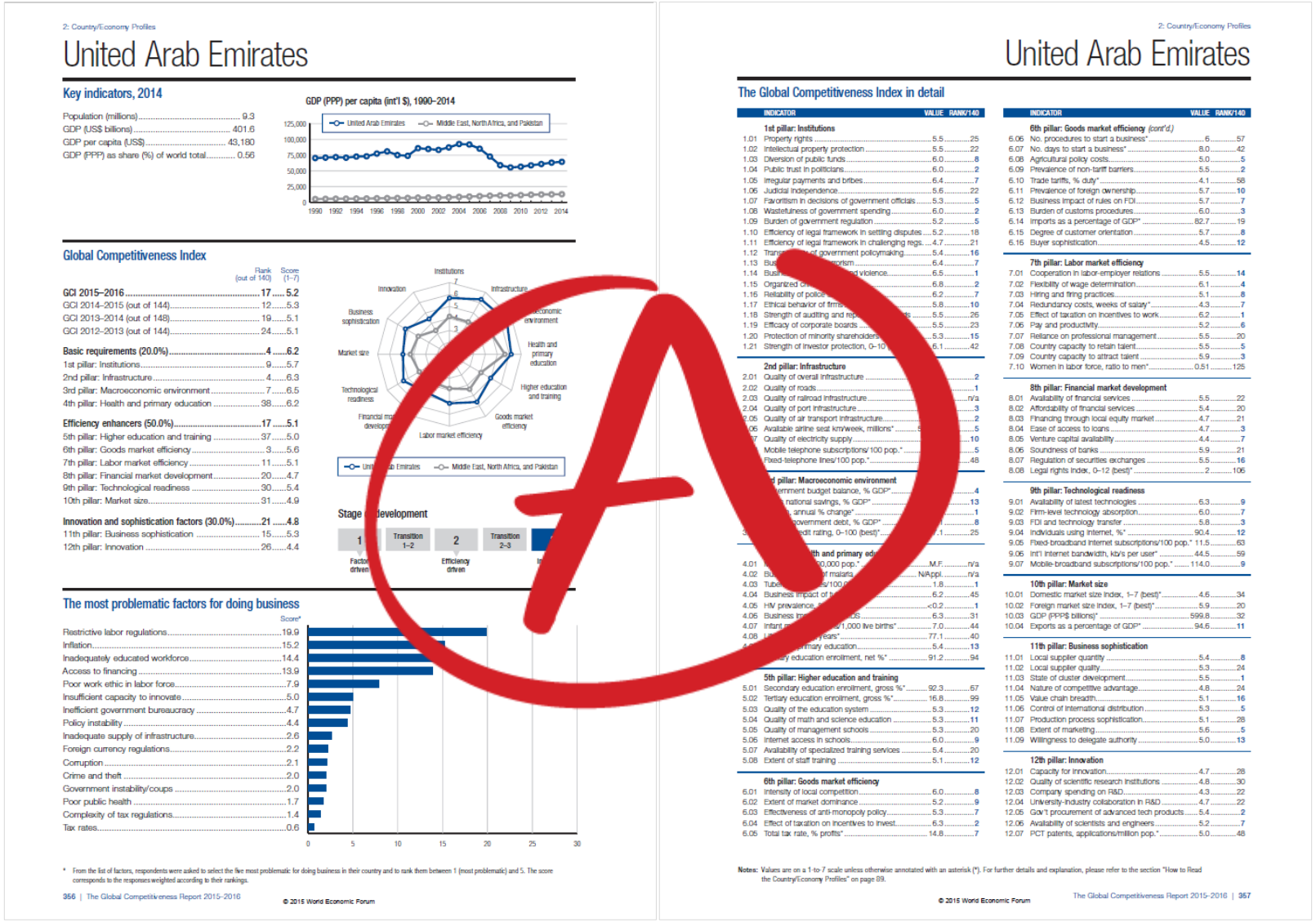


But how to measure success of these goals?...

Sources: UAE Vision 2021.

Use international reports to gauge success

An index score is like a GPA; its components show where to improve



2: Country/Economy Profiles

United Arab Emirates

Key indicators, 2014

Population (millions)	9.3
GDP (US$ billions)	401.6
GDP per capita (US$)	43,180
GDP (PPP) as share (%) of world total	0.56

GDP (PPP) per capita (int'l $), 1990–2014

Global Competitiveness Index

	Rank (out of 140)	Score (1–7)
GCI 2015–2016	17	5.2
GCI 2014–2015 (out of 144)	12	5.3
GCI 2013–2014 (out of 148)	19	5.1
GCI 2012–2013 (out of 144)	24	5.1
Basic requirements (20.0%)	4	6.2
1st pillar: Institutions	9	5.7
2nd pillar: Infrastructure	4	6.3
3rd pillar: Macroeconomic environment	7	6.5
4th pillar: Health and primary education	38	6.2
Efficiency enhancers (50.0%)	17	5.1
5th pillar: Higher education and training	37	5.0
6th pillar: Goods market efficiency	3	5.6
7th pillar: Labor market efficiency	11	5.1
8th pillar: Financial market development	20	4.7
9th pillar: Technological readiness	30	5.4
10th pillar: Market size	31	4.9
Innovation and sophistication factors (30.0%)	21	4.8
11th pillar: Business sophistication	15	5.3
12th pillar: Innovation	26	4.4

Stage development

The most problematic factors for doing business

	Score*
Restrictive labor regulations	19.9
Inflation	15.2
Inadequately educated workforce	14.4
Access to financing	13.9
Poor work ethic in labor force	7.9
Insufficient capacity to innovate	5.0
Inefficient government bureaucracy	4.7
Policy instability	4.4
Inadequate supply of infrastructure	2.6
Foreign currency regulations	2.2
Corruption	2.1
Crime and theft	2.0
Government instability/coups	2.0
Poor public health	1.7
Complexity of tax regulations	1.4
Tax rates	0.6

* From the list of factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

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2: Country/Economy Profiles

United Arab Emirates

The Global Competitiveness Index in detail

	INDICATOR	VALUE	RANK/140
	1st pillar: Institutions		
1.01	Property rights	5.5	25
1.02	Intellectual property protection	5.5	22
1.03	Diversion of public funds	6.0	8
1.04	Public trust in politicians	6.0	2
1.05	Irregular payments and bribes	6.4	7
1.06	Judicial independence	5.6	22
1.07	Favoritism in decisions of government officials	5.3	5
1.08	Wastefulness of government spending	6.0	2
1.09	Burden of government regulation	5.2	5
1.10	Efficiency of legal framework in settling disputes	5.2	18
1.11	Efficiency of legal framework in challenging regs.	4.7	21
1.12	[illegible] of government policymaking	5.4	16
1.13	[illegible]	6.4	7
1.14	[illegible] violence	6.5	1
1.15	Organized [illegible]	6.8	2
1.16	Reliability of police	6.2	7
1.17	Ethical behavior of firms	5.8	10
1.18	Strength of auditing and [illegible]	5.5	26
1.19	Efficacy of corporate boards	5.5	23
1.20	Protection of minority shareholders' [illegible]	5.3	15
1.21	Strength of investor protection, 0–10 [illegible]	6.1	42
	2nd pillar: Infrastructure		
2.01	Quality of overall infrastructure	[illegible]	2
2.02	Quality of roads	[illegible]	1
2.03	Quality of railroad infrastructure	[illegible]	n/a
2.04	Quality of port infrastructure	[illegible]	3
2.05	Quality of air transport infrastructure	[illegible]	2
2.06	Available airline seat km/week, millions*	[illegible]	5
2.07	Quality of electricity supply	[illegible]	10
	Mobile telephone subscriptions/100 pop.*	[illegible]	5
	Fixed-telephone lines/100 pop.*	[illegible]	48
	[illegible]d pillar: Macroeconomic environment		
	[illegible]ernment budget balance, % GDP*	[illegible]	4
	[illegible] national savings, % GDP*	[illegible]	13
	[illegible] annual % change*	[illegible]	1
	[illegible]overnment debt, % GDP*	[illegible]	8
	[illegible]edit rating, 0–100 (best)*	[illegible]	25
	[illegible]th and primary ed[illegible]		
4.01	[illegible]00,000 pop.*	M.F.	n/a
4.02	[illegible] of malaria	N/Appl.	n/a
4.03	Tube[illegible]s/100 [illegible]	1.8	1
4.04	Business impact of t[illegible]	6.2	45
4.05	HIV prevalence, [illegible]	<0.2	1
4.06	Business [illegible]DS	6.3	31
4.07	Infant [illegible] 1,000 live births*	7.0	44
4.08	[illegible] years*	77.1	40
	[illegible]ary education	5.4	13
	[illegible]ity education enrollment, net %*	91.2	94
	5th pillar: Higher education and training		
5.01	Secondary education enrollment, gross %*	92.3	67
5.02	Tertiary education enrollment, gross %*	16.8	99
5.03	Quality of the education system	5.3	12
5.04	Quality of math and science education	5.3	11
5.05	Quality of management schools	5.3	20
5.06	Internet access in schools	6.0	9
5.07	Availability of specialized training services	5.4	20
5.08	Extent of staff training	5.1	12
	6th pillar: Goods market efficiency		
6.01	Intensity of local competition	6.0	8
6.02	Extent of market dominance	5.2	9
6.03	Effectiveness of anti-monopoly policy	5.3	7
6.04	Effect of taxation on incentives to invest	6.3	2
6.05	Total tax rate, % profits*	14.8	7

	INDICATOR	VALUE	RANK/140
	6th pillar: Goods market efficiency *(cont'd.)*		
6.06	No. procedures to start a business*	6	57
6.07	No. days to start a business*	8.0	42
6.08	Agricultural policy costs	5.0	5
6.09	Prevalence of non-tariff barriers	5.5	2
6.10	Trade tariffs, % duty*	4.1	58
6.11	Prevalence of foreign ownership	5.7	10
6.12	Business impact of rules on FDI	5.7	7
6.13	Burden of customs procedures	6.0	3
6.14	Imports as a percentage of GDP*	82.7	19
6.15	Degree of customer orientation	5.7	8
6.16	Buyer sophistication	4.5	12
	7th pillar: Labor market efficiency		
7.01	Cooperation in labor-employer relations	5.5	14
7.02	Flexibility of wage determination	6.1	4
7.03	Hiring and firing practices	5.1	8
7.04	Redundancy costs, weeks of salary*	4.3	7
7.05	Effect of taxation on incentives to work	6.2	1
7.06	Pay and productivity	5.2	6
7.07	Reliance on professional management	5.5	20
7.08	Country capacity to retain talent	5.5	5
7.09	Country capacity to attract talent	5.9	3
7.10	Women in labor force, ratio to men*	0.51	125
	8th pillar: Financial market development		
8.01	Availability of financial services	5.5	22
8.02	Affordability of financial services	5.4	20
8.03	Financing through local equity market	4.7	21
8.04	Ease of access to loans	4.7	3
8.05	Venture capital availability	4.4	7
8.06	Soundness of banks	5.9	21
8.07	Regulation of securities exchanges	5.5	16
8.08	Legal rights index, 0–12 (best)*	2	105
	9th pillar: Technological readiness		
9.01	Availability of latest technologies	6.3	9
9.02	Firm-level technology absorption	6.0	7
9.03	FDI and technology transfer	5.8	3
9.04	Individuals using Internet, %*	90.4	12
9.05	Fixed-broadband Internet subscriptions/100 pop.*	11.5	63
9.06	Int'l Internet bandwidth, kb/s per user*	44.5	59
9.07	Mobile-broadband subscriptions/100 pop.*	114.0	9
	10th pillar: Market size		
10.01	Domestic market size index, 1–7 (best)*	4.6	34
10.02	Foreign market size index, 1–7 (best)*	5.9	20
10.03	GDP (PPP$ billions)*	599.8	32
10.04	Exports as a percentage of GDP*	94.6	11
	11th pillar: Business sophistication		
11.01	Local supplier quantity	5.4	8
11.02	Local supplier quality	5.3	24
11.03	State of cluster development	5.5	1
11.04	Nature of competitive advantage	4.8	24
11.05	Value chain breadth	5.1	16
11.06	Control of international distribution	5.3	5
11.07	Production process sophistication	5.1	28
11.08	Extent of marketing	5.6	5
11.09	Willingness to delegate authority	5.0	13
	12th pillar: Innovation		
12.01	Capacity for innovation	4.7	28
12.02	Quality of scientific research institutions	4.8	30
12.03	Company spending on R&D	4.3	22
12.04	University-industry collaboration in R&D	4.7	22
12.05	Gov't procurement of advanced tech products	5.4	2
12.06	Availability of scientists and engineers	5.2	7
12.07	PCT patents, applications/million pop.*	5.0	48

Notes: Values are on a 1-to-7 scale unless otherwise annotated with an asterisk (*). For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 89.

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Source: WEF-GCR.

The UAE in international rankings

Build "Brand UAE" with 3rd-party recognition; prioritise National Agenda goals

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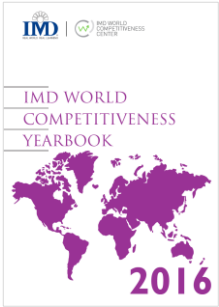

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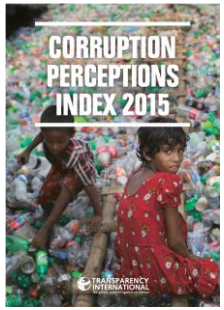

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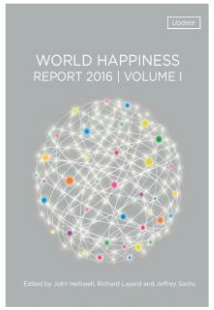

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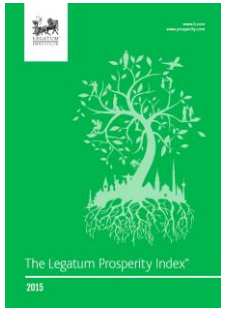

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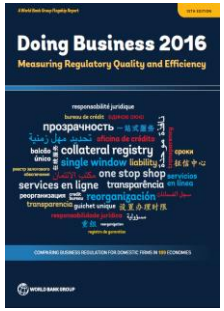

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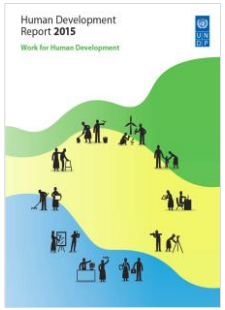

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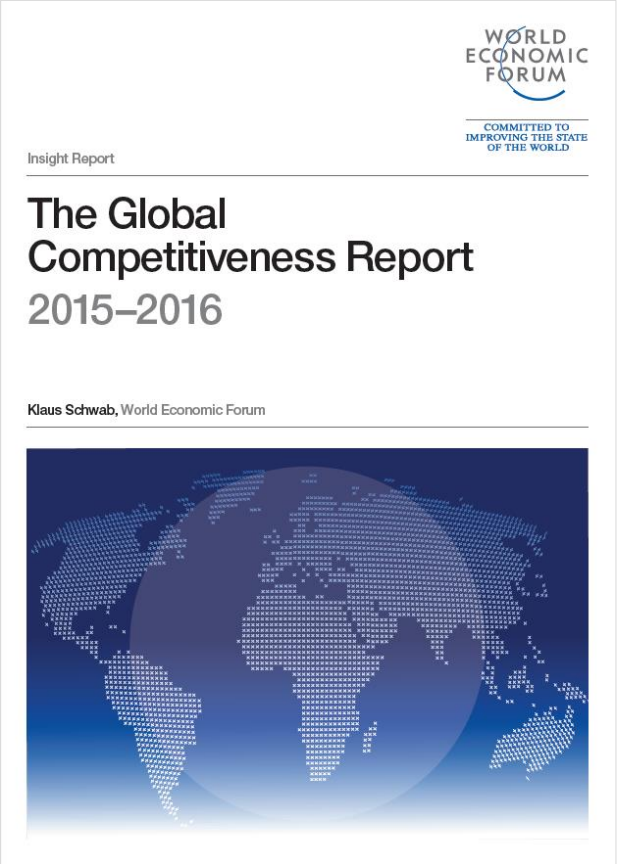
Sources: Earth Institute, IMD, INSEAD, Legatum Institute, Transparency International, UNDP, WEF, World Bank, Y/Zen

WEF Global Competitiveness Report (GCR)

The GCR is the commonly accepted flagship report on competitiveness



Competitiveness pertains to the ability & performance of a firm, sub-sector or country to sell and supply goods & services in a given market, in relation to the ability & performance of other firms, subsectors or countries in the same mkt.

Institutions

Infrastructure

Macroeconomic environment

Health & primary education

Higher education & training

Goods market efficiency

Labour market efficiency

Financial market development

Technological readiness

Market size

Business sophistication

Innovation

Source: WEF-GCR.

Report ranks countries on their competitiveness

Index computes a final score based on 110 indicators

5.24

$$s(x) = \begin{cases} 6\left(\dfrac{x - min}{max - min}\right) + 1 & if\ x \in G \\ -6\left(\dfrac{x - min}{max - min}\right) + 7 & if\ x \in B \end{cases}$$

and $S(x) = \sum_{k=1}^{K} \omega_k s_k(x)$

The UAE has set itself a goal to be top-10 globally by 2021 (currently 17)

Source: WEF-GCR.

Competitiveness strategy: Diversification

Targeted sectors of economy can be mapped to international reports

Photo: Masdar stock.

Low oil price ➔ transition to knowledge economy

Global Innovation Index indicators provide framework for policies

Non-oil GDP to be 36% of economy by 2030 (Abu Dhabi)

- R&D % of GDP
- PISA scores
- Patents

- Sponsor fund
- Education reform
- Reduce fees

Leveraging Dubai Expo 2020 to pivot economy

"Connecting minds; creating the future" ➔ evolve into knowledge economy

25 million visits to the Expo site, of which over 2/3 are expected to come from abroad

Expo budget of €5.2 BN capex and €1.3 BN opex; opex offset by oprev (€1.3 BN)

Creation of 250-280k jobs (every direct Expo job ➔ ~45-50 additional jobs created)

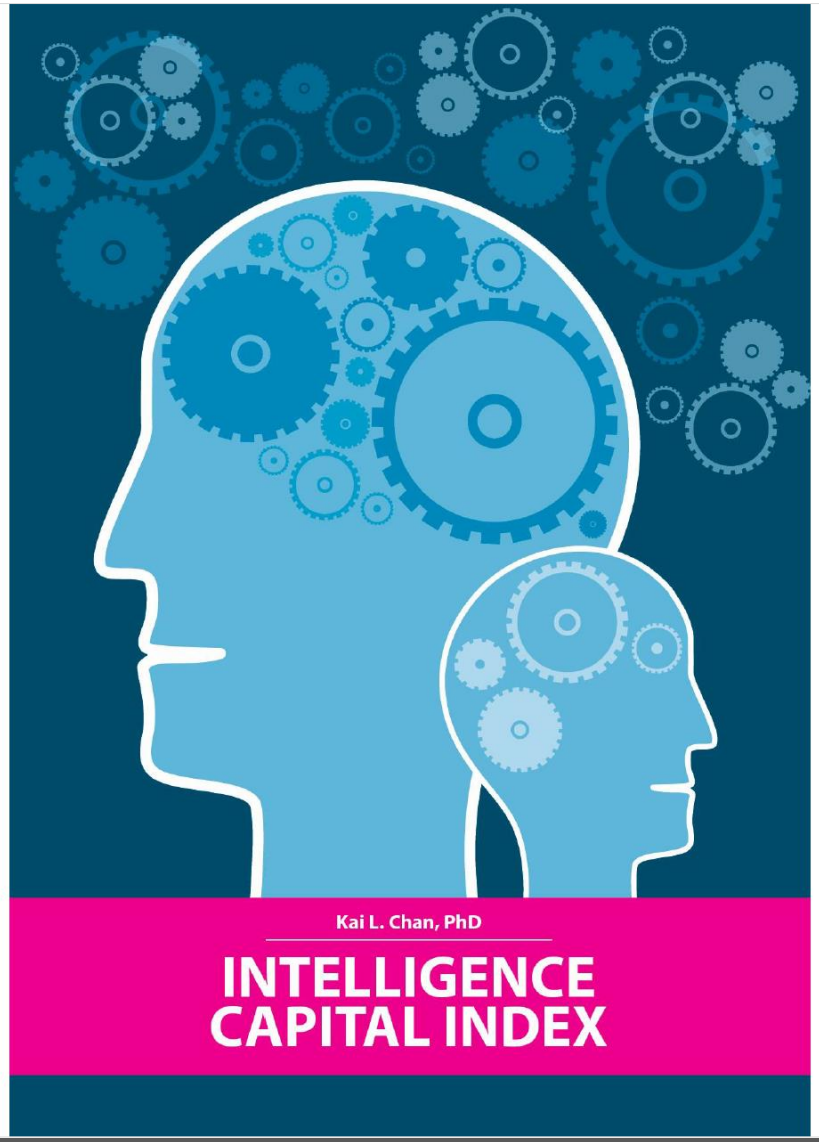
Economic impact:

- Direct: 15.7 BN
- Indirect: 6.0 BN
- Induced: 4.2 BN
- Total: 25.9 BN

Sources: DTCM, Dubai Expo 2020, DWTC

Next phase of development: knowledge economy

"Intelligence capital" is the key that will unlock the knowledge economy



National Agenda has goal to transform UAE into a knowledge economy. This will require improving its "intelligence capital" (Chan, 2016).

NATIONAL KEY PERFORMANCE INDICATORS

Competitive Knowledge Economy

INDEX	INDICATOR	DEFINITION	SOURCE	2012 RESULTS	2021 TARGETS	KEY SPONSOR
1	Non-Oil Real GDP Growth	An indicator that measures the real annual economic growth of all sectors except oil. It is one of the most important macroeconomic indicators and reflects the overall state of the national economy over consecutive years. GDP includes the total value of annual production of goods and services.	Federal Comettiveness and Statistics Authority	4.84% (Preliminary-2014)	5%	Ministry of Economy
2	Gross National Income (GNI) per Capita	An indicator that measures the average income per person in a country. GNI includes the value of all the services and products that have been produced in the country (i.e. GDP) in a given year, in addition to the country's net income from abroad (such as dividends and interest).	World Bank	Rank 3 (2014)	Among the top 10 countries	Ministry of Economy
3	Net Inflow of Foreign Direct Investment as % of GDP	An indicator that measures foreign direct investment (FDI) as a percentage of GDP. FDI is defined as the amount of net inflow of investment required to achieve a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term and short-term capital, as shown in the balance of payments.	United Nations Conference on Trade and Development (Unctad)	2.66% (2014)	5%	Ministry of Economy
4	Global Competitiveness Index	A composite indicator that measures the competitiveness of countries based on (12) perspectives: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation.	World Economic Forum- Global Competitiveness Report	Rank 17 (2015-2016 Report)	Among the top 10 countries	Federal Comettiveness and Statistics Authority
5	Share of UAE Nationals in the Workforce	An indicator that measures the share of employed UAE nationals out of the total workforce (expatriates and nationals), across all sectors (NKPI specific to UAE)	The National HR Development & Employment Authority (Tanmia)	5.0% (2014)	8%	The National HR Development & Employment Authority (Tanmia)
6	Ease of Doing Business Index	A composite indicator that measures government procedures around business activity. It is based on (11) sub-indicators: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, and labor market regulations	World Bank	Rank 31 (2016 Report)	Rank 1	Federal Comettiveness and Statistics Authority
7	Emiratisation Rate in the Private Sector	An indicator that measures the share of UAE nationals employed in the private sector, as a proportion of the total private sector workforce (expatriates and nationals) (NKPI specific to UAE)	Ministry of Labor	1.0% (2014)	5%	Ministry of Labor
8	SME Contribution to Non-Oil GDP	An indicator that measures the share of GDP produced by small and medium-sized enterprises	Federal Comettiveness and Statistics Authority	60% (2011)	70%	Ministry of Economy
9	Global Entrepreneurship and Development Index (GEDI)	An indicator that measures 3 sub-indices: Entrepreneurial Attitudes (the general disposition of a country's population toward entrepreneurs, entrepreneurship, and business start-ups), Entrepreneurial Activity (the startup activity in the medium- or high-technology sector initiated by educated entrepreneurs in response to business opportunities in a somewhat competitive environment), and Entrepreneurship Aspiration (the efforts of the early stage entrepreneur to introduce new products and services, develop new production processes, penetrate foreign markets, substantially increase the number of firm employees, and finance the business with either formal or informal venture capital, or both).	Global Entrepreneurship and Development Institute	Rank 19 (2016 Report)	Among the top 10 countries	Ministry of Economy
10	Global Innovation Index	A composite index that measures the performance of innovation in countries. Innovation inputs are measured based on institutions, human capital and research, infrastructure, market sophistication and business sophistication, while innovation output is measured by knowledge and technology outputs, and creative outputs.	INSEAD	Rank 47 (2015 Report)	Among the top 10 countries	Ministry of Economy
11	Share of "Knowledge Workers" in the Labor Force	An indicator that measures the share of highly skilled workers, workers in high-level professions, and workers classified under the International Standard Classification of Occupations (ISCO - 08) of the total workforce. These jobs include: legislators, managers, business executives and specialists and technicians in the scientific, technical and humanitarian fields (i.e. the top levels of the classification of occupations).	Ministry of Labor	22.76% (2014)	40%	Ministry of Labor
12	Research and Development Expenditure as % of GDP	An indicator that measures the total domestic expenditure on research and development (in the public, academic, and private sector), as a percentage of GDP	Federal Comettiveness and Statistics Authority	0.5% (2012)	1.5%	Ministry of Higher Education and Scientific Research

www.KaiLChan.ca

Sources: Kai L. Chan (2016) – NB: Kazakhstan places 52nd on the Intelligence Capital Index

Thank you!

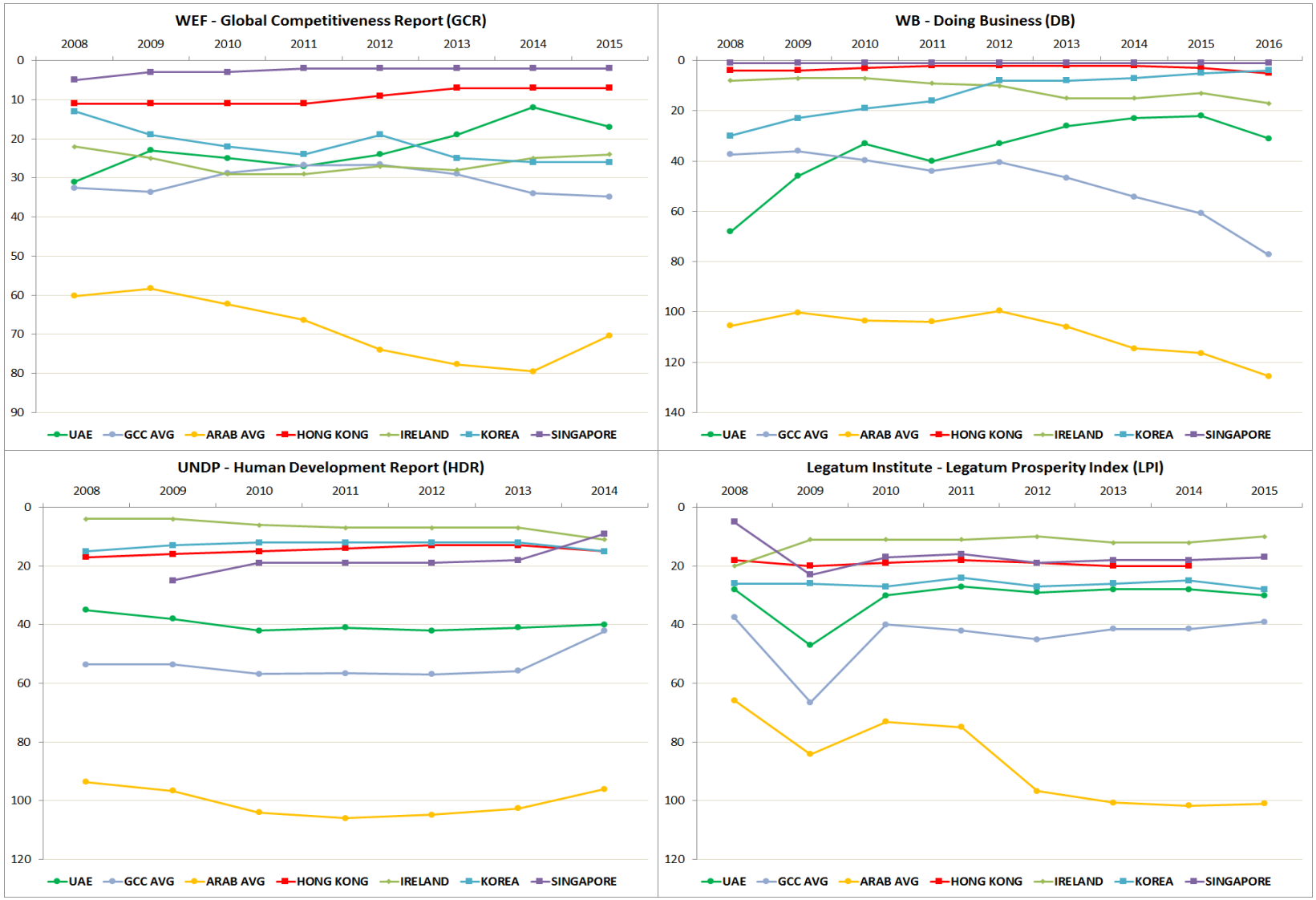
Best wishes to Kazakhstan in achieving its “2050 Strategy”

Рақмет сізге спасибо

Kazakhstan **2050**

APPENDIX: Historical performance of the UAE

WEF-GCR, WB-DBR, UNDP-HDR, LI-LPI



Sources: Legatum Institute, UNDP-HDR, WEF-GCR, World Bank DBR.

APPENDIX: Overview of MENA region

Dependency on oil and youth unemployment biggest challenges

COUNTRY	POP. (MM)	GDP ($BN)	GDP / CAPITA	GVT TYPE	GROSS CRUDE REV. ($BN)	OIL SHARE EXPORTS (%)	MAJOR ENDEMIC RELIGION(S)	ARMED CONF.	U3 RATE (%)	YOUTH U3 RATE (%)	LIT. RATE (%)
Algeria	39.5	227.8	$5,767	Republic	69.8	96.3	Sunni		9.8	24.0	72.6
Bahrain	1.3	34.0	$25,860	Monarchy	2.4	72.4	Shia, Sunni	✓	7.4	27.9	94.6
Egypt	87.9	284.9	$3,241	Republic	27.4	36.6	Sunni, Coptic	✓	12.7	38.9	73.9
Iran	78.0	402.7	$5,163	Republic	126.5	82.2	Shia		13.26	29.7	85.0
Iraq	36.0	222.9	$6,191	Republic	121.2	99.1	Shia, Sunni, Christian	✓	16.0	34.1	78.5
Israel	8.3	305.0	$36,763	Republic	0.2	4.9	Judaism, Islam	✓	6.3	10.7	97.1
Jordan	6.7	36.6	$5,467	Monarchy	0.0	1.1	Sunni, Christian		12.6	33.7	95.9
Kuwait	4.0	179.3	$44,340	Monarchy	111.4	96.9	Sunni, Shia,		3.1	19.6	93.9
Lebanon	5.0	47.5	$9,565	Republic	0.0	1.8	Shia, Sunni, Christian	✓	6.5	20.6	89.6
Libya	6.2	49.3	$7,901	Republic	39.0	99.4	Sunni	✓	19.6	51.2	89.5
Morocco	33.3	112.6	$3,385	Monarchy	0.2	4.4	Sunni		9.2	18.5	67.1
Oman	4.1	80.5	$19,644	Absolute	37.5	76.7	Ibadi		7.9	20.5	86.9
Qatar	2.2	212.0	$98,362	Absolute	81.9	94.6	Sunni, Shia		0.5	1.5	96.3
Saudi Arabia	30.8	777.9	$25,280	Absolute	459.7	84.5	Sunni, Shia		5.7	28.7	87.2
Syria	18.0	77.5	$4,315	Republic	7.2	7.8	Sunni, Shia, Christian	✓	10.8	29.8	84.1
Tunisia	11.0	49.1	$4,473	Republic	2.6	13.9	Sunni	✓	13.3	31.2	79.1
UAE	**9.1**	**336.1**	**$44,089**	**Absolute**	**128.0**	**76.5**	**Sunni, Shia**		**3.8**	**9.9**	**90.0**
Yemen	26.0	45.5	$1,751	Republic	5.3	89.0	Sunni, Shia	✓	17.4	29.8	65.3
MENA	**407.6**	**3,562**	**$8,738**	**N/A**	**1,220.3**	**68.4**			**11.7**	**29.7**	**78.9**
China	1,368.0	10,355.4	$7,575	Socialist	176.7	0.7			4.6	10.1	95.1

Population, GDP, GDP/capita for 2015. Crude revenues (gross) and unemployment rates for 2013. Oil share of exports for 2012. Literacy rate for most recent available year.

Sources: CIA Factbook, IEA, IMF, national sources, World Bank

APPENDIX: Overview of the GCC

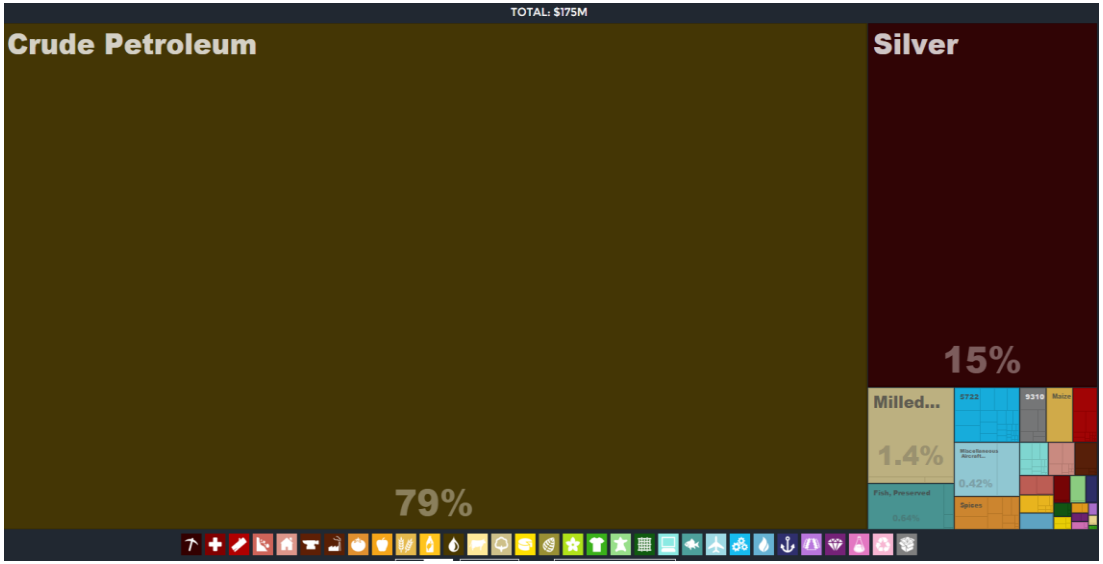
Surpluses from hydrocarbon wealth have been used to build buffers

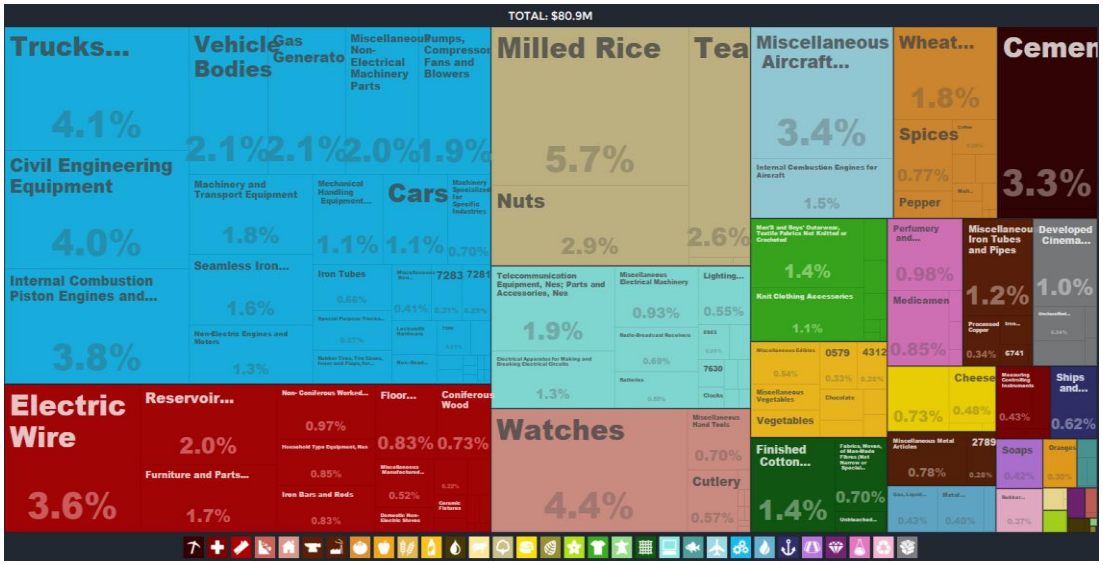
COUNTRY	POPULATION	GDP ($BN)	GDP / CAPITA	FOREIGN POP'N (%)	OIL SHARE OF GDP (%)	PROD. (K BBL / DAY)	OIL RES. (BN BBLI)	YRS RES.	CURRENCY REGIME	SWF ASSETS ($BN)
Bahrain	1,316,500	34	$25,860	54.0	19	61.2	0.1	5.6	Pegged USD	11
Kuwait	3,583,000	179	$50,051	62.0	50	2,811.8	104.0	101.3	Basket	548
Oman	4,099,904	81	$19,644	44.2	50	945.1	5.5	15.9	Pegged USD	19
Qatar	2,235,431	212	$94,842	87.0	60	2,067.3	25.2	33.4	Pegged USD	256
Saudi Arabia	30,770,375	778	$25,280	31.1	45	11,600.4	268.4	63.3	Pegged USD	763
UAE	9,445,600	416	$44,089	88.5	33	3,229.6	97.8	82.9	Pegged USD	1,079
GCC Total	**52,333,253**	**1,700**	**$32,489**	**47.8**	**44.2**	**20,715.4**	**501.0**	**66.2**	**N/A**	**2,676**
Eurozone	334,570,678	13,447	$40,192							
USA	320,201,000	17,416	$54,392							

Sources: CIA, Factbook, IEA, IMF, SWFI, World Bank

APPENDIX: UAE trade composition (1971)

Diversified trade partners but concentration risk in exported products

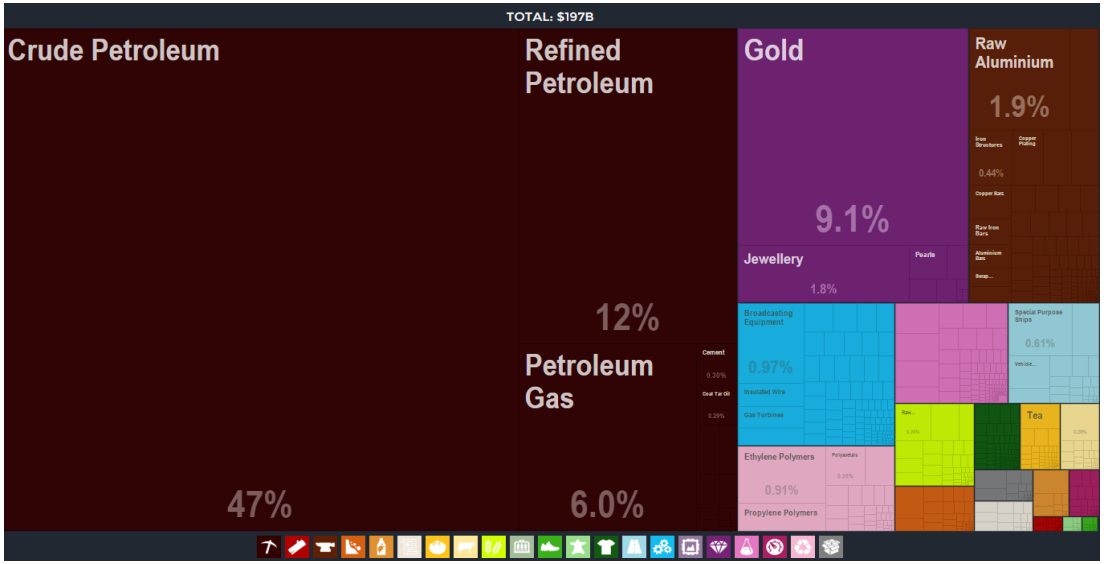


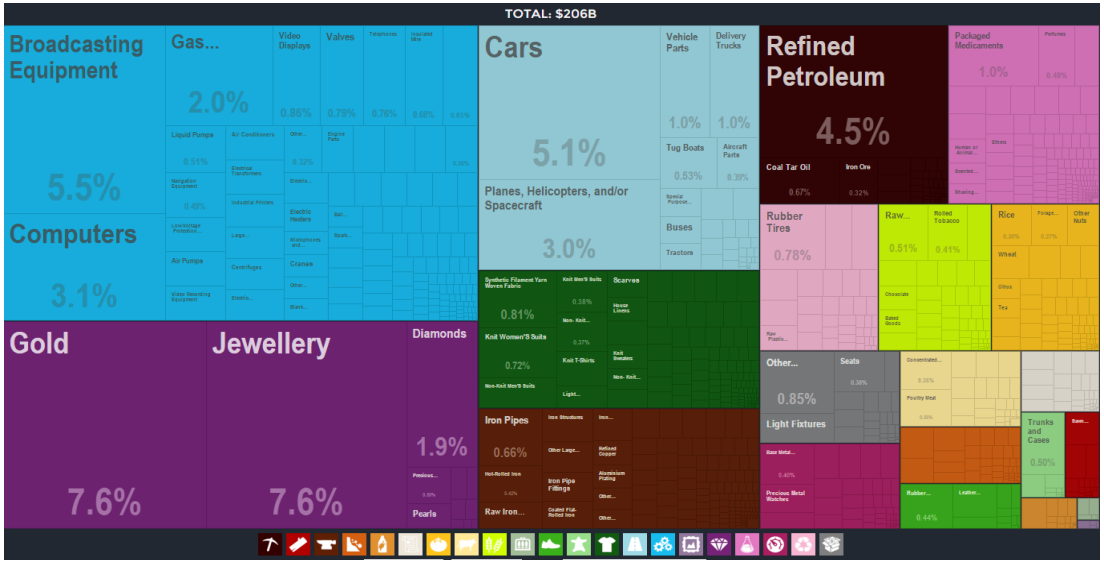


Source: Observatory of Economic Complexity (MIT)

APPENDIX: UAE trade composition (2013)

Hydrocarbons still dominate trade





Source: Observatory of Economic Complexity (MIT)