IRAQ

I. Initial Endowments
II. Ethnic and Religious History
   • Sunnis, Shi’ites and Kurds.
   • Iraqi tribes
III. Economic History
IV. Baathist Period
V. Economics of Sanctions
VI. Iraq in 2003: A snapshot
VII. Nation Building

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I. Initial Endowments

• Physical Endowments:
  – Fertile Crescent:
    • Tigris and Euphrates: Irrigation and navigation
    • Access to the Ocean
    • Climate
  – Mineral resources: 2\textsuperscript{nd} largest oil reserves, natural gas.

• Trade Routes (Mediterranean-India)
II. Religious History

• The Succession of Muhammad
  – Shi’ites: The House of Ali (cousin and son-in Law)
  – Sunnis: Muhammad’s Father-in-law (Abu Bakr)
II. Religious History

• Center of Shi’ite unrest: Southern Iraq (Kufa, Najaf, Karbala)
  – Little change in Iraq’s demographic maps since 8\textsuperscript{th} century:
    • Center: “Sunni triangle”
    • Shi’ites in the south.
  – Early struggle for the Caliphate: Umayyads vs. the House of Ali
  – Abbasids take control (foundation of Baghdad, golden period)

• Split in the Islamic Empire:
  – Shi’ite Revolt in North Africa (Modern Tunisia)
    • Three Caliphates: Fatimids in Cairo (Shi’ite), Abbasids in Baghdad (Sunni), Umayyads in Cordoba (modern Spain)
II. Ethnic History

• Kurdish region
  – Location: Zagros Mountains
    • Iraq (17-23%), Turkey (22%), Iran (10%), Syria (8%)
  – Origin
    • Indo-European tribes (settled in Zagros mountains during 2nd millennium B.C.)

• Demographics in Modern Iraq
  – Tribal society
  – Ethnic and Religious regions
    – South: Shi’ites
    – Center: Sunnis
    – North: Kurds
III. Economic History

- **8th-13th Century: Center of Islamic Empire**
  - 8th Century: Baghdad new capital of Caliphate
  - Abbasid period: Center of intellectual and trade activity
  - Largest City outside China (1/2 million)
  - Mongol Invasion of Baghdad (1258)
  - End of the Caliphate

- **1350-1800: Period of Decline**
  - What went wrong?
    - Recall history lectures (1st week).
The Abbasid Caliphate (750-1258)
III. Economic History

• 1800-1870: Unfulfilled Promise
  – All elements for a rapid development:
    • Physical Endowments (rivers, climate, minerals)
    • Location:
      » Access to the ocean
      » Proximity to big markets (Mediterranean, Iran, India)
  – Causes of slow growth
    • Frequent floods (at least 20 major floods in 67 years)
    • Epidemic outbreaks (plague, cholera)
      – Between 1/3-1/2 Baghdad population perished in 1831.
    • Political unrest between tribes and Ottoman Governors
      – Main issue: Tax collection
      – Predominant resistance in the Shi’ite south
III. Economic History

• 1870-1914: Expansion of Foreign Trade
  – Suez Canal brought the Persian Gulf within reach of Europe
  – Exports: Wheat, dates, livestock products
    • Twelve-fold increase
  – Imports: 20-fold increase

• Transformation of rural Iraq
  • Expansion of agriculture
    – Sedentarization of Tribes
    – Land reform by Ottoman Land Code:
      » Large landowners (sheikhs) and landless peasants
III. Economic History

• 1800-1910 (cont.):
  – Population growth due to increase in agricultural production
  – Little development of infrastructure
    • No modern transportation networks (railroads, ports)
  – Low human capital levels
  – No industrial development
  – Less developed than most ME countries
III. Economic History

• 1910-1914: Hopes of development
   – British and German interest in Oil explorations:
     • Anglo-German oil company wanted exploration concessions
     • Master plan for developing transportation networks connecting Iraq to Europe
   – WWI: Development plans were halted
     • Iraq was a major battlefield
     • British army developed some infrastructure.
III. Economic History

• 1914-1941: Rapid development
  – British control (direct control until 1921, pro-western kingdom afterwards)
    • Development of infrastructure:
      – Transportation, electricity…
    • Expansion of agriculture (land ownership unchanged)
    • Emergence of a financial sector (mainly foreign banks)
    • Development of low-tech industrial sector (tobacco, leather products)
    • Education and health improvements
  – 1934: Beginning of large-scale oil production
III. Economic History

• 1941-1950: Slowdown
  – Reduction in Oil Production:
    • WWII
    • Shutdown of Pipeline to Haifa (1948)
  – Other Factors:
    • High inflation (shortages during WWII and its aftermath)
    • Exodus of Jewish community hurt Iraq’s trade

• 1950-1958: Rapid Growth (7-11% annually)
  – Sharp increase in Oil revenues
    • New pipelines, renegotiation of royalties
  – Industrial and social development (Government sponsored)
IV. Baathist Period

• The 1958 revolution
  – Overthrown of the Monarchy
  – Government instability: Civil unrest, internal clashes (Kurds-Arabs, Baathists-Communists)
  – Unsuccessful Land Reform (very disruptive, slow redistribution: more than ½ of the land held by the Government)
  – Ambitious industrialization plans
    • Nationalization of large-scale industries in 1964
    • Nationalization of oil concessions to private companies

• 1968: Saddam Hussein takes power
  – Tight control of economic and political activity
IV. Baathist Period

• The pre-war period (1968-1980)
  – Mixed Economy:
    • Small private sector
    • Government owns major industries, nationalized financial sector
    • Complete nationalization of the Oil sector (1972)
  – Economic growth
    • Rapid growth due to rise in oil revenues
    • Improvements in Education and human capital levels
    • Big increases in living standards
    • Expansion of military and police
IV. Baathist Period

• The Curse of Oil
  – Extremely high rents from Oil
  – Need for control and protection
    • Buildup of Military (7% labor force) and Police
  – “Arabization” of Kurdish Iraq.
    • Oil fields locations (Shi’ite and Kurdish areas)

• Demographic changes in Kirkuk Area:
  – 1978 - 1992
Source: CIA
Map from 1978
Oilfields and Facilities

Source: CIA
Map from 1992
IV. Baathist Period

• The Iran-Iraq war (1980-1989)
  – Initial halt in oil production
  – Sharp reduction in investment and GDP per capita
  – Increase in government debt (decline in oil revenues)
  – Decline in education and social programs
  – Sluggish economic growth (recovery after 1984)
  – Unequal distribution of burdens: Shi’ites, Kurds hard hit by the slowdown.
    • Intensification of demographic relocation in the north
    • Kurd uprising and subsequent repression
    • Shi’ite unrest in the south

• Intensification of demographic relocation in the north

• Kurd uprising and subsequent repression

• Shi’ite unrest in the south
IV. Baathist Period

• The Persian Gulf War
  – Infrastructure severely damaged
    – Electricity grid
    – Oil Wells
    – Transportation Networks
  – Aborted Shi’ite and Kurdish uprisings
    – Severe punishment of Shi’ite areas
    – War within Kurdish factions (Iran and Saddam backing opposite sides). Kurds eventually gain autonomy.
  – UN sanctions
    • Initial effects:
      – Complete halt to foreign revenues
      – Inability to import capital equipment
      – Huge increase in debt burden
V. The Economics of Sanctions

• Gains from trade vanished (forced autarky)
  • Huge comparative advantage unexploited due to halt in trade (Oil production).

• Roving vs. Stationary Bandit (Olson)
  – Two-Period Expropriation Model:
    – Household lives two periods: \( U(C_1, C_2) \), \( W \) (initial endowment)
    – Constant Returns to Scale Technology:
      » Invest \( K \) in period 1 and get an output \( (1+r)K \) in period 2
    – Expropriation rate (t):
      » A “bandit” can steal (expropriate) a fraction \( t \) of \( K \) in period 1 and of the output in period 2.
    – Timing:
      » Period 1: Household invests \( K \), bandit expropriates \( tK \)
      » Period 2: Household produces \( (1+r)(1-t)K \), bandit gets \( t(1+r)(1-t)K \)
V. The Economics of Sanctions

• Roving vs. Stationary Bandit (cont.)
  – Household optimal decision:
    • Choose K so that \( \text{MRS}_{c_1,c_2} = (1+r)(1-t)^2 \)
      A) No expropriation \((t=0)\).
        – Optimal investment: \( \text{MRS} = \text{MRT} = (1+r) \)
      B) Stationary Bandit (lives for two periods): Chooses expropriation rate that allows for some investment \((0<t<1)\).
        – Investment is lower: \( \text{MRS} < \text{MRT} \). (Now investment yields lower returns to the household)
      C) Roving Bandit (lives only for one period): Expropriates all the capital \((t=1)\).
        – Knowing so, household does not invest at all.
V. The Economics of Sanctions

• Sanctions: Stationary Bandit $\Rightarrow$ Roving Bandit
  – Formal vs. informal sector
    • More productive activity goes to the informal economy (harder to expropriate)
  – Productive vs. expropriation activity
    • More resources diverted towards expropriation activities (higher returns than productive activities)

• Macroeconomic Policies harder to implement
  – $\downarrow$ Foreign revenues $\Rightarrow$ $\uparrow$ debt burden
  – Inflationary risks (shortages, food rationing)
  – Tax base erosion (formal vs. informal sector)
V. The Economics of Sanctions

• Economic Consequences
  – Sharp reduction of Economic activity
    • No investment (sharp deterioration of infrastructure)
    • Sharp decline in GDP per capita
  – Hyperinflation
    • Printing of money (source of gov. revenues)
  – Sharp declines in living standards
    • Child malnutrition (relief under 1996 oil-for-food program):
      » Infant mortality grew from 20-30/1000 before the war to 80/1000 after the Gulf war
    • Further marginalization of Shi’ites
Investment

Figure 2: Gross Capital Formation (1980-2001)
V. The Economics of Sanctions

• Economic Consequences (cont.)
  – Deterioration of Economic Policy
    • Roving bandit hypothesis, shift responsibility (US, UN)
    • Halt to alphabetization programs
      – 2001: 59% females aged 15-24 are illiterate (55% males)
  – Worsening of Business environment
    • Hike in expropriation activities (smuggling: cats of the embargo)
  – Emergence of a Kurdish Autonomy
    • No-fly zone: Independent north (in practice)
    • Economic growth in the north
    • Emergence of Kurdish governance structures
## VI. Iraq in 2003

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<thead>
<tr>
<th></th>
<th>1979</th>
<th>2003</th>
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<tbody>
<tr>
<td>GDP per capita (2002 $)</td>
<td>2,410</td>
<td>960</td>
</tr>
<tr>
<td>Oil production (barrels per day)</td>
<td>3.5 million</td>
<td>2.5 million</td>
</tr>
<tr>
<td>Export earnings per capita (2002 $)</td>
<td>4,100</td>
<td>544</td>
</tr>
<tr>
<td>Foreign debt (2002 $)</td>
<td>$41 billion (as of 1990)</td>
<td>$180 billion</td>
</tr>
<tr>
<td>%Labor force in the Government or the Army</td>
<td>-</td>
<td>1/3</td>
</tr>
<tr>
<td>Average monthly wage (2002 $)</td>
<td>-</td>
<td>$40</td>
</tr>
</tbody>
</table>
VI. Iraq in 2003

• Worn-out infrastructure
  – Electricity, Telecommunications
  – Oil facilities (capacity below 1979 levels)
• Very limited Health and Education services
• Low female labor force participation (7.5%)
  • Low by ME standards
• Disenfranchised population (Shi’ites)
• Ethnic and religious fractionalization
  • Ethnic tension between Kurds and Arabs in the north, and between Shi’ites and Sunnis in the center.
VII. Nation Building

• Law and Order
  – Reform and creation of structures of governance
  – Security

• Rebuilding Infrastructure

• Creation of a Tax Base

• External Debt (it crowds out external financing of the private sector)
  • Debt relief: Debt forgiveness, drop of claims for war reparations
  • Debt restructuring: From short- to long-term loans
VII. Nation Building

• Positive factors:
  – Easy access to huge oil reserves
  – High oil prices
  – Educated class of technocrats

• Potential Economic Issues
  – Security:
    • Essential for economic activity
    • Perceptions of living standards’ improvements
  – Ethnic and religious frictions
    • Location of Oil fields and ethnic/religious division lines
Slow recovery

Compiled by: Deepa Dhume, Harvard
“Five Priorities for Economic Reform in Iraq” March 08
Slow recovery

Crude Oil Production and Exports

Sources: Brookings Iraq Index, OPEC Annual Statistical Bulletin
Big challenge