



**AMERICAN
ECONOMIC
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The Impact of Economic Sanctions on Managing the International Conflict: A case study on the Iran-West Conflict

By :

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The Impact of Economic Sanctions



Background

- After the Islamic Revolution in 1979, Iran had start a new era of its forging policy with the west especially the United States (Embassy hostage crisis).
- The Islamic Republic of Iran's policy was in contrast with the U.S.'s regional and national interests .

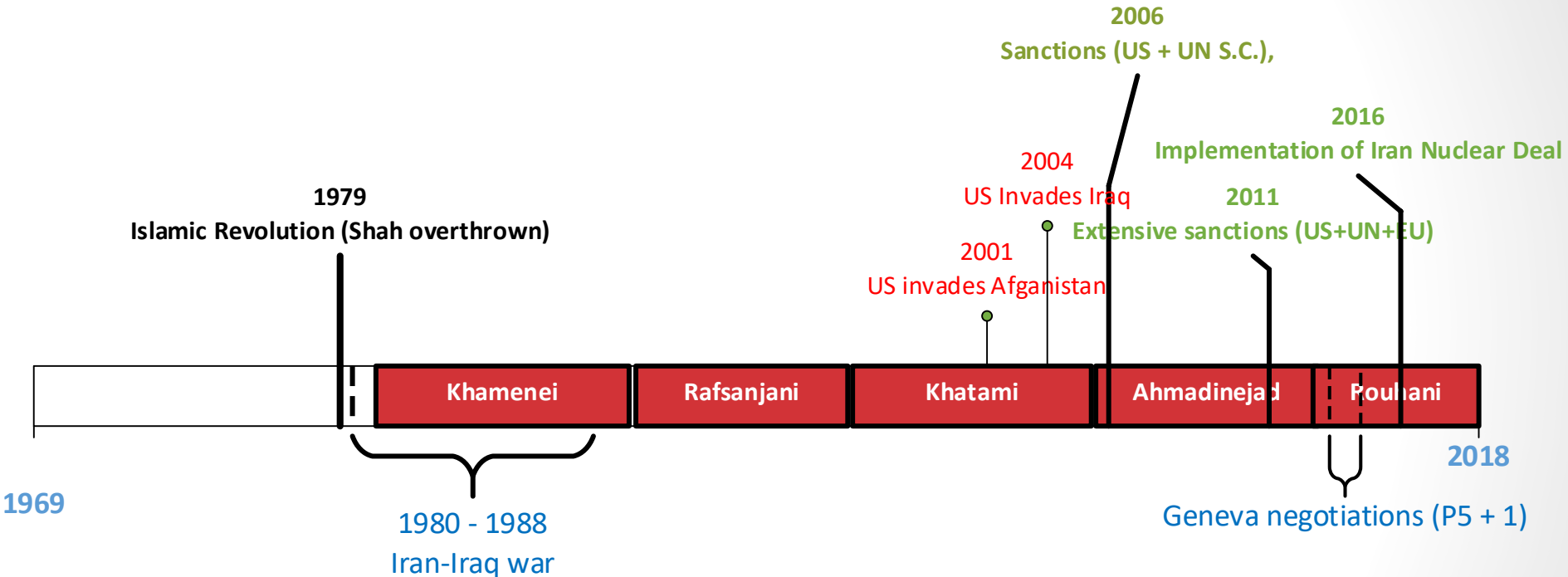


Background

- Since the Revolution , Iran was under a different political and economic sanctions imposed by the United States.
- The U.S. had successfully assembled several western countries to execute multilateral sanctions on Iran.
- The purpose of the sanctions was to discourage Iran from pursuing its nuclear ambitions or its desire to be an axis of power in the Middle East.
- Therefore, for more than three decades , the economic and financial embargo, has been a constant pillar of Western foreign policy against Iran.



Timeframe of the study



The data sources for the research include the following:

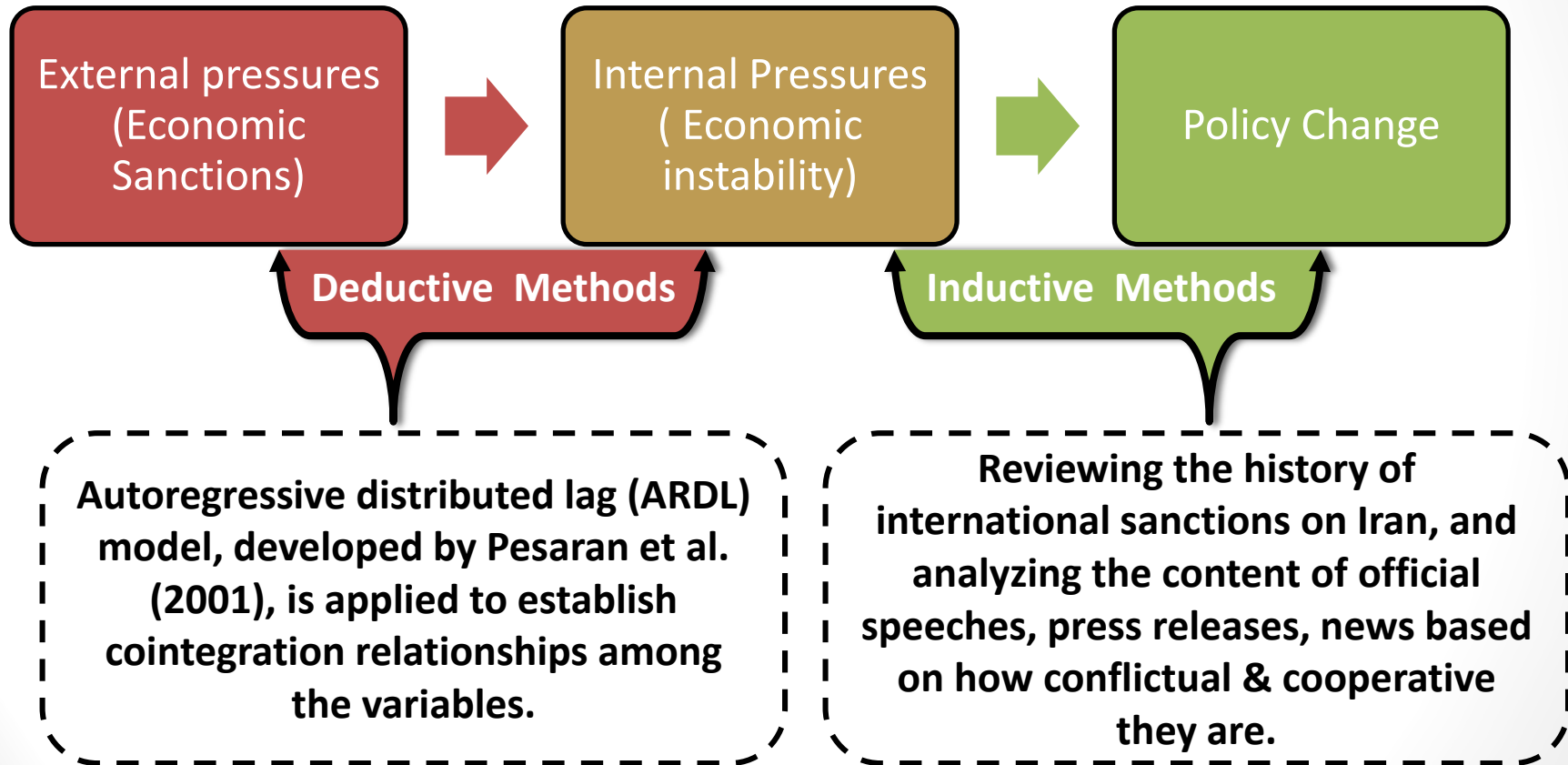
- World Development Indicators (WDI)
- The Economist Intelligence Unit (EIU) CountryData
- Polity IV database
- Goldstein-Weighted events datasets

The Research aim

- The research attempts to answer whether economic sanctions have succeeded to diminish Iran's nuclear and defensive capabilities or led to changes in its foreign policy toward its neighbours in the region.
- The main aim of the study is to examine the effectiveness of economic sanctions as a foreign policy tool to settle international conflicts, using Iran as a case study.

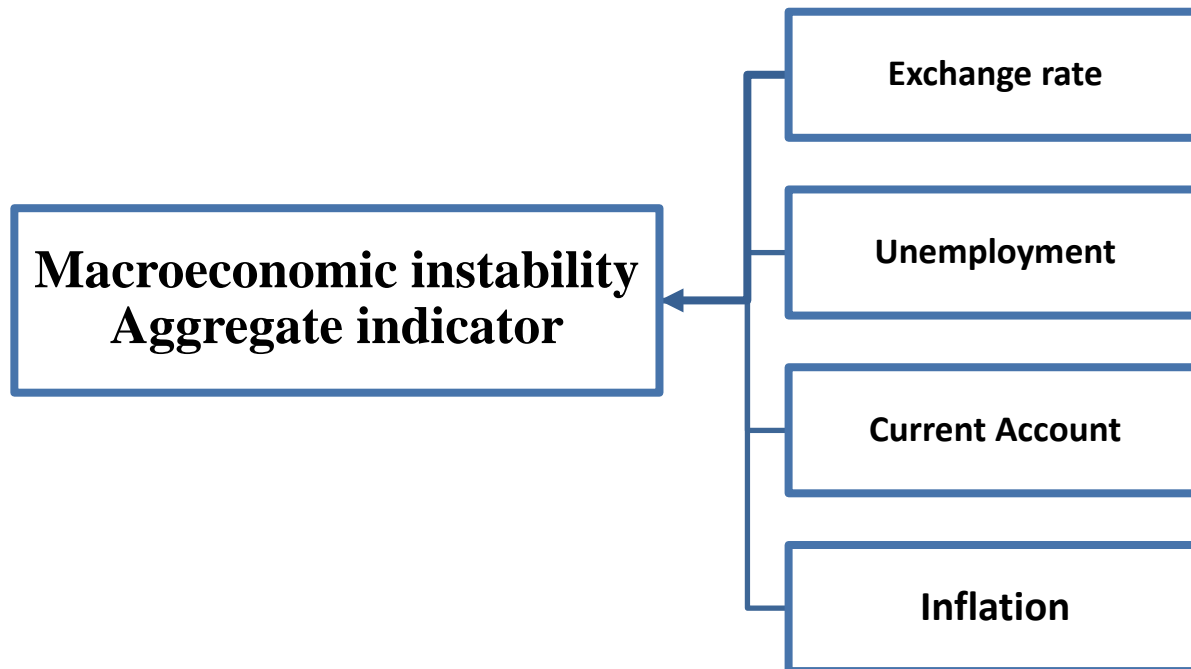


The framework of the research



Specification of the Control Variables

In order to measure the macroeconomic stability in Iranian economy, the research generate aggregated macroeconomic indicators using “**Principal Component Analysis**” (**PCA**). This approach allows computing target variables into one separate group.



The Empirical Model of the research

$$\text{mis}_t = \alpha_0 + \alpha_1 L \text{pop}_t + \alpha_2 LGDP_t + \alpha_3 Lmx_t + \alpha_4 Loil_t + \alpha_5 Lfdi_t + \alpha_6 Lcre_t + \alpha_7 poli_t + \alpha_8 sanc_t + \alpha_9 war_t + \varepsilon_i$$

***Lmst* = Macroeconomic instability Aggregate indicator (PCA)**

L pop_t = population growth

LGDP_t = GDP (constant 2010 US\$)

Lmxt = Iran's military expenditure (constant 2010 US\$)

Loilt = Oil rents (% of GDP)

Lfdit = Foreign direct investment, net inflows (BoP, current US\$)

Lcret = Domestic credit to private sector (% of GDP)

polit = political institutions , Polity IV database , -10 (full autocracy) to 10 (full democracy)

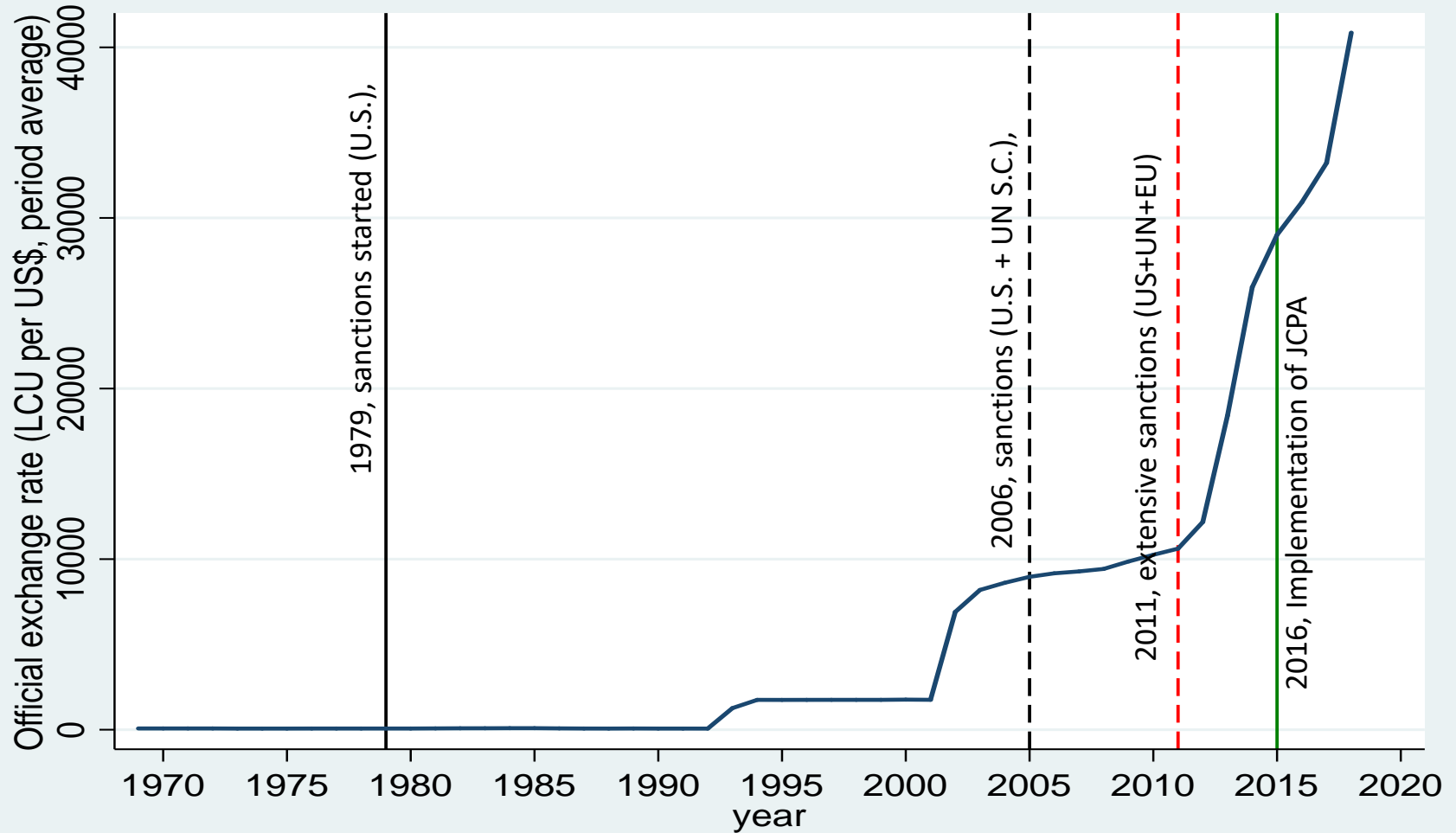
sanc = dummy variable capturing the intensity of sanctions. This variable is coded as an ordinal variable (0-3), no sanctions (0), limited sanctions (1), moderate sanctions (2), and extensive sanctions (3)

war = war dummy variable, Iran-Iraq war (1980-1988)

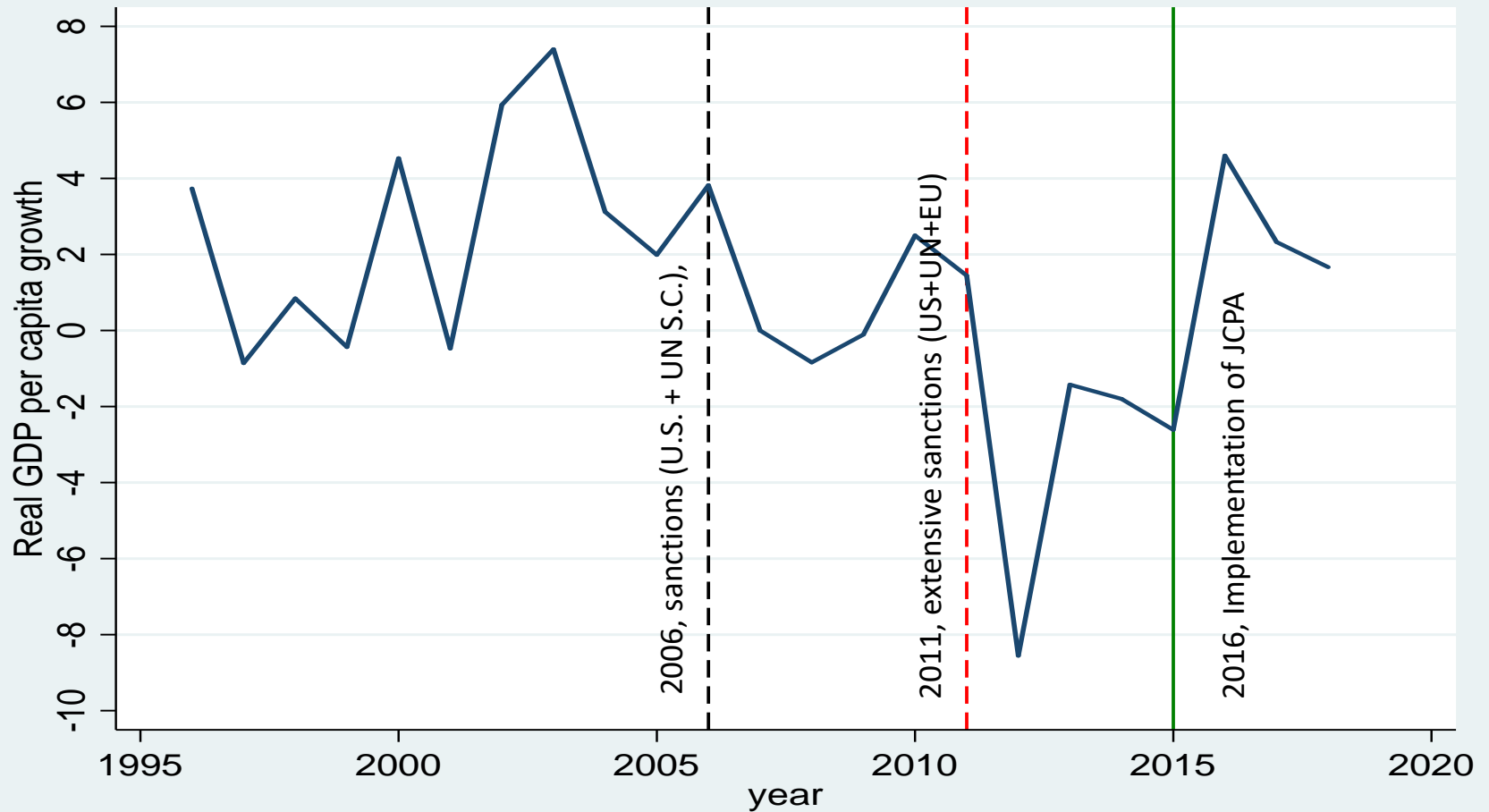
The Results



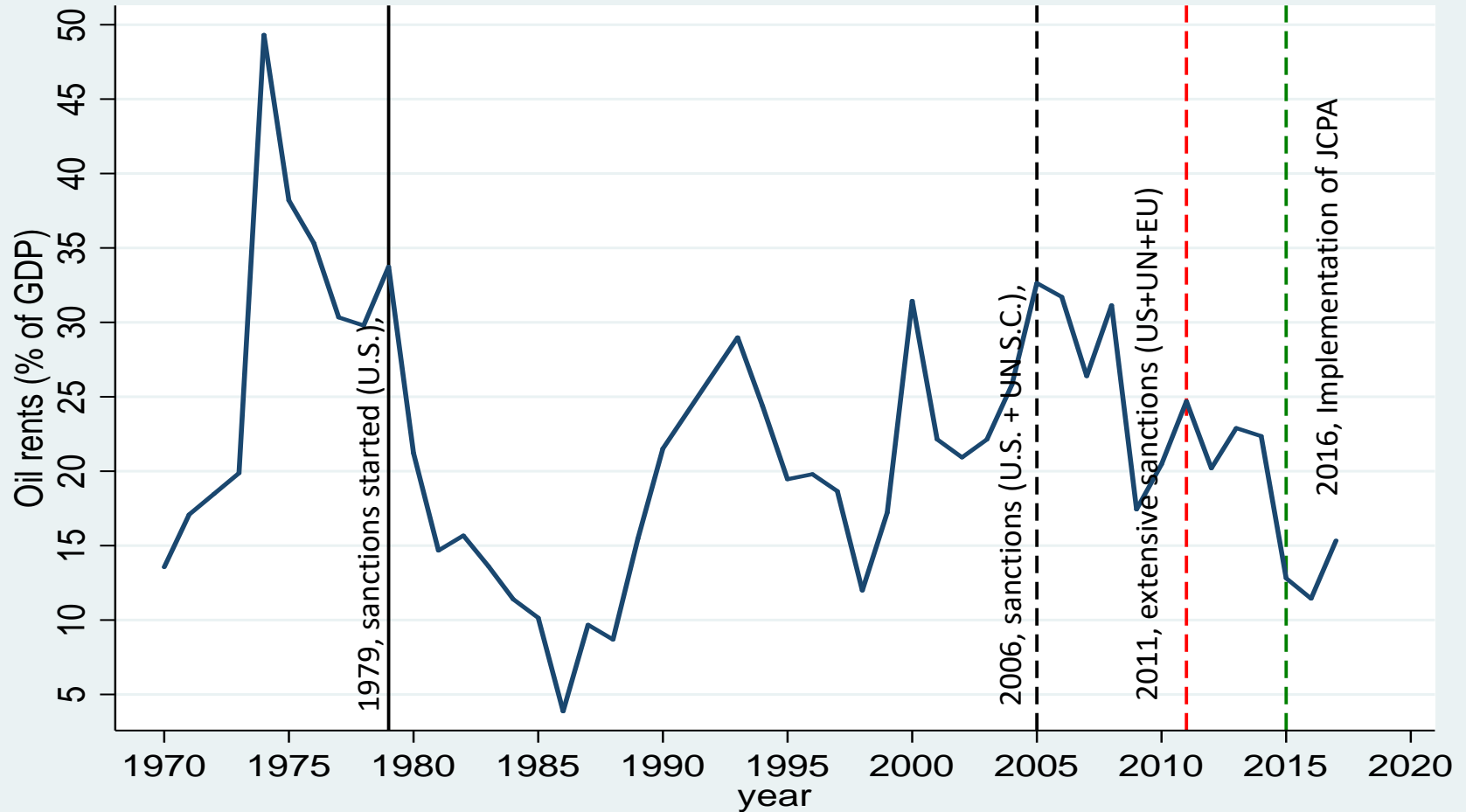
Sanctions effect on Exchange rate



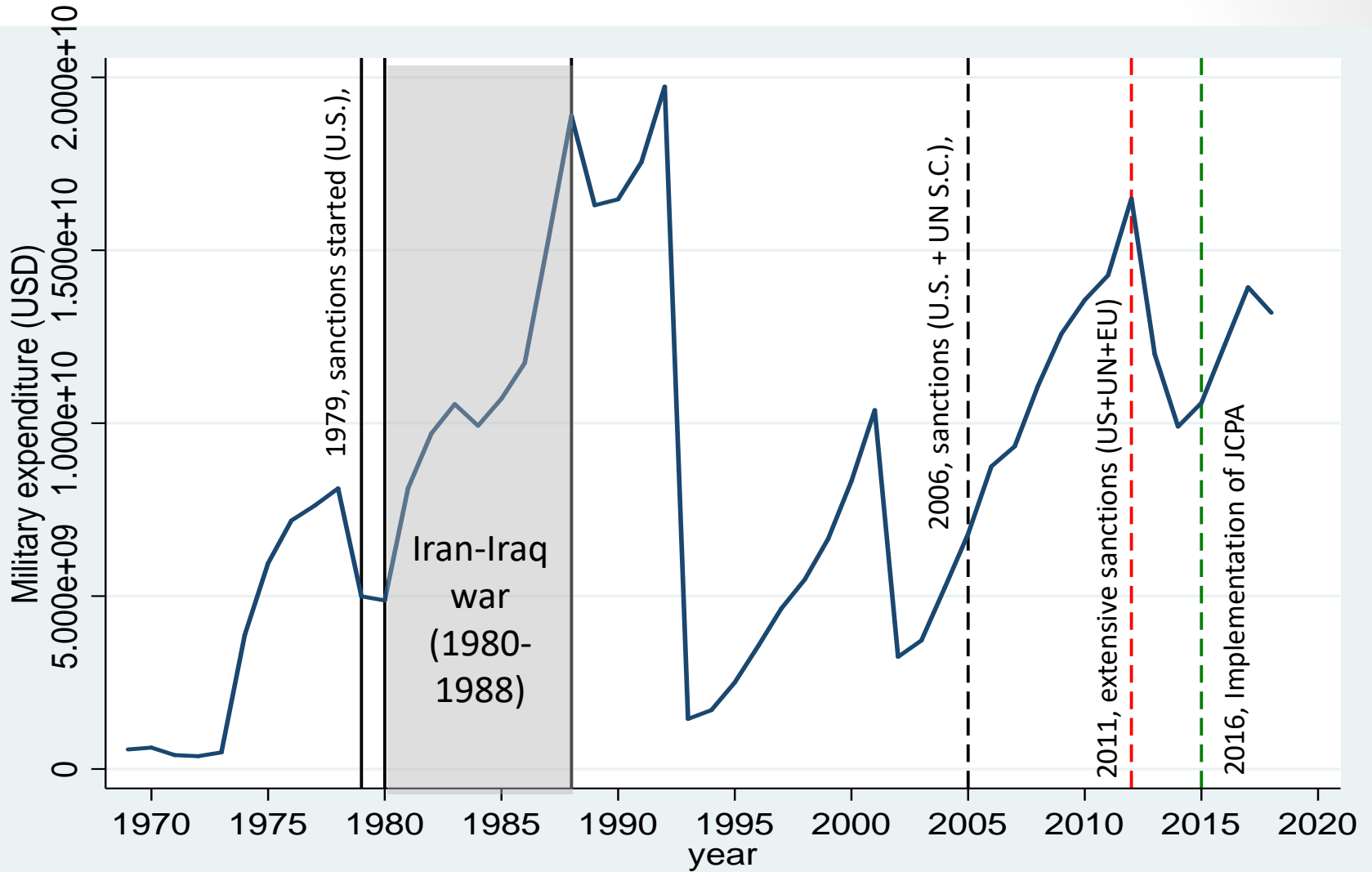
Sanctions effect on Real GDP per capita growth



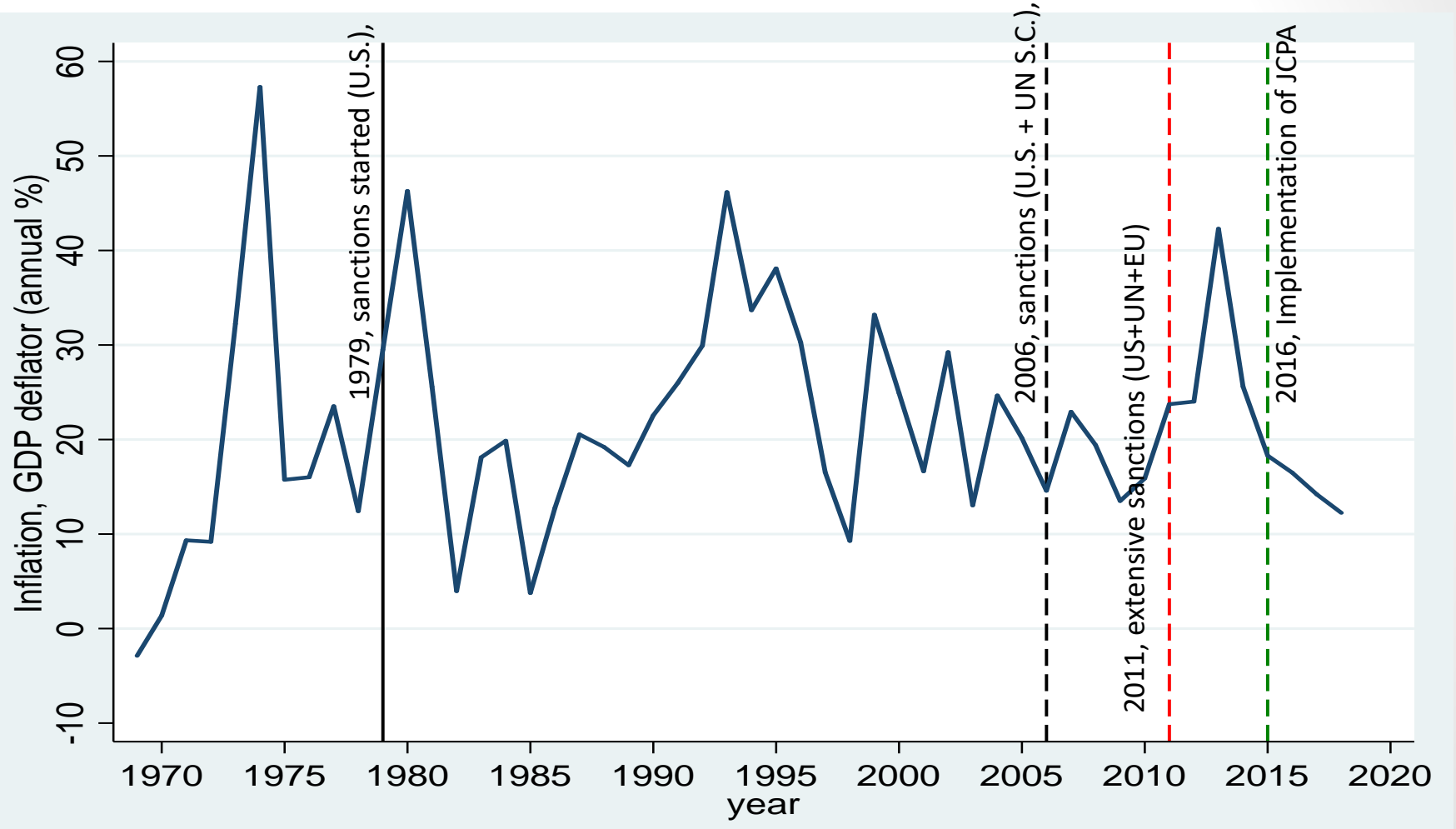
Sanctions effect on Oil rent (% GDP)



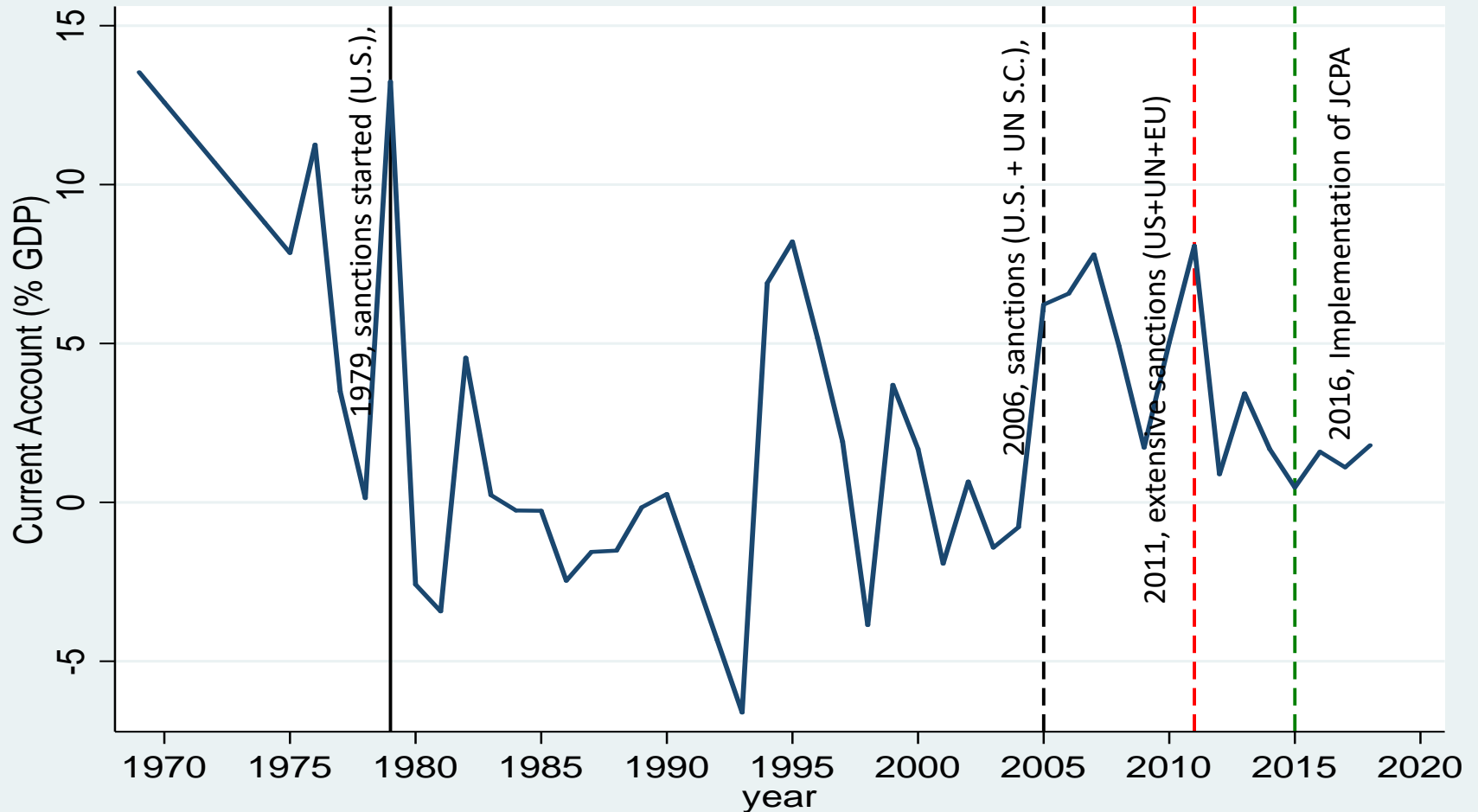
Sanctions effect on Military spending



Sanctions effect on Inflation

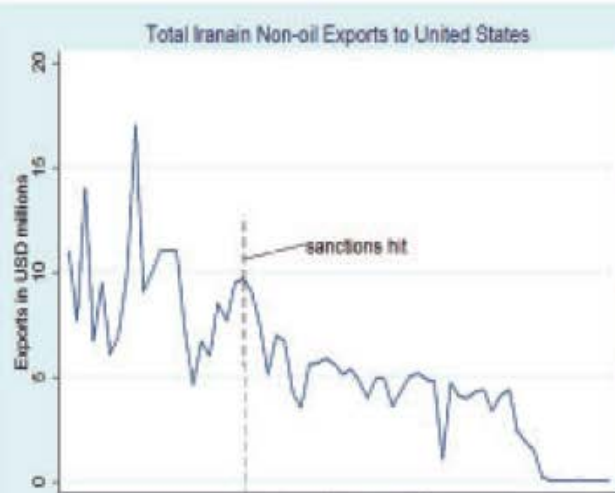


Sanctions effect on Current account

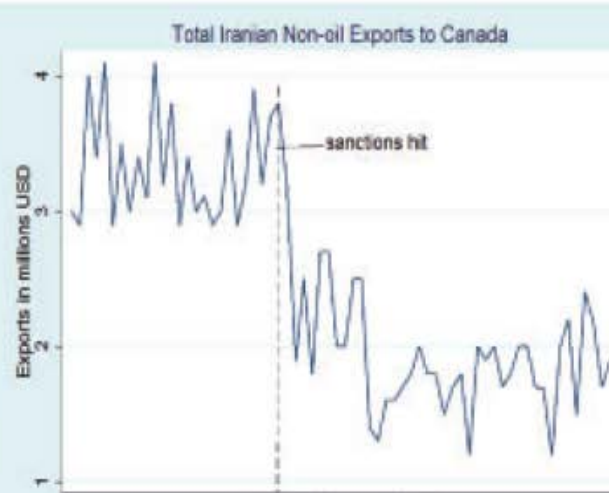


Iranian exports to (selected) sanctioning countries

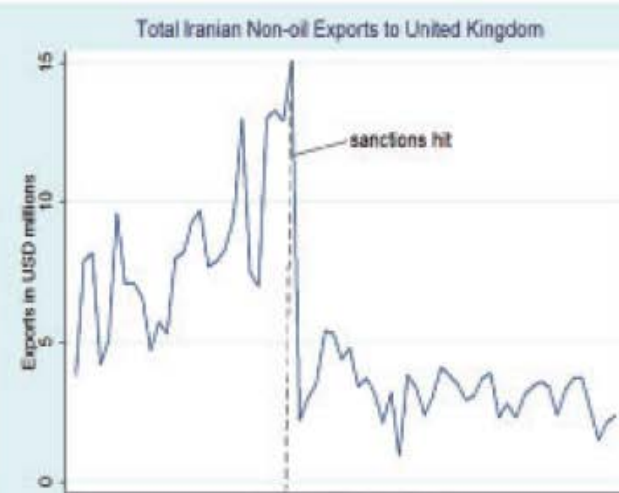
A- Iranian exports to US



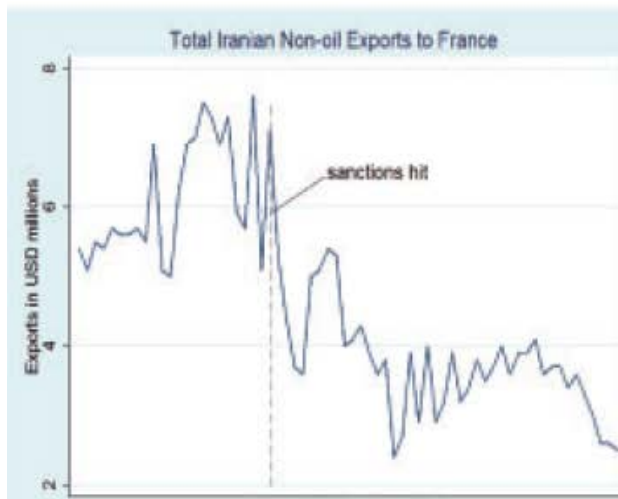
B- Iranian exports to Canada



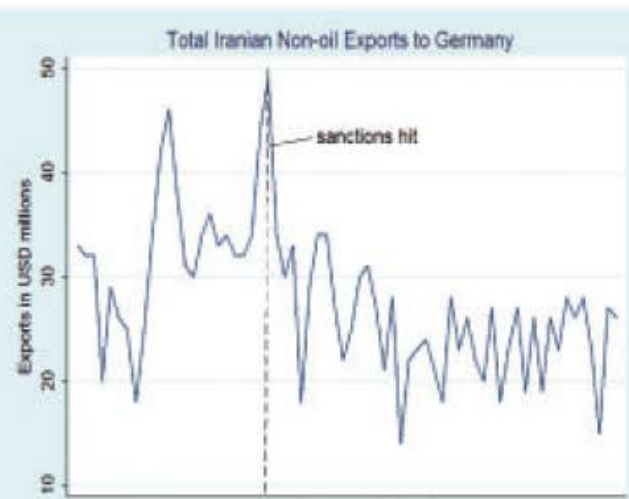
C- Iranian exports to UK



D- Iranian exports to France



E- Iranian exports to Germany

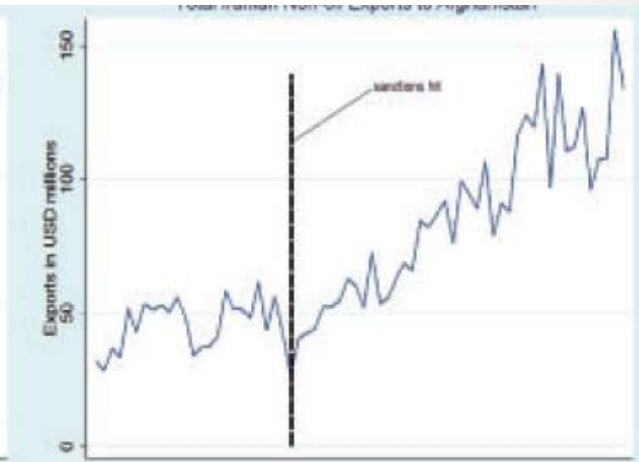
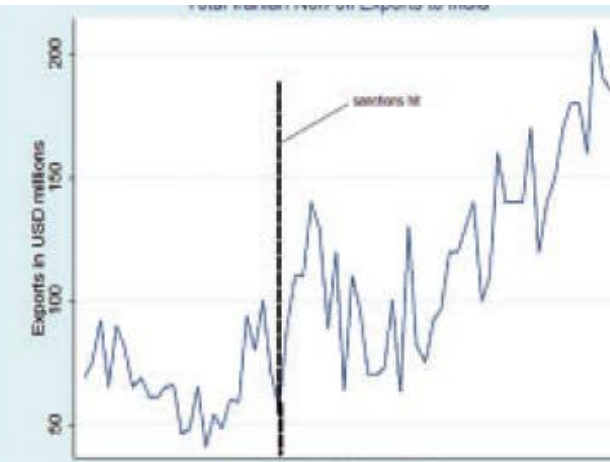
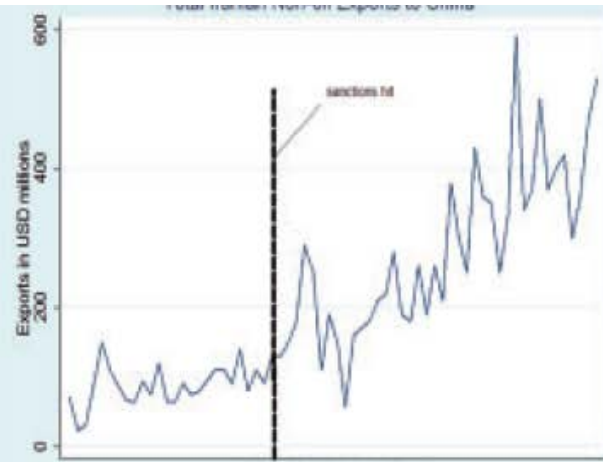


Iranian exports to (selected) non-sanctioning countries

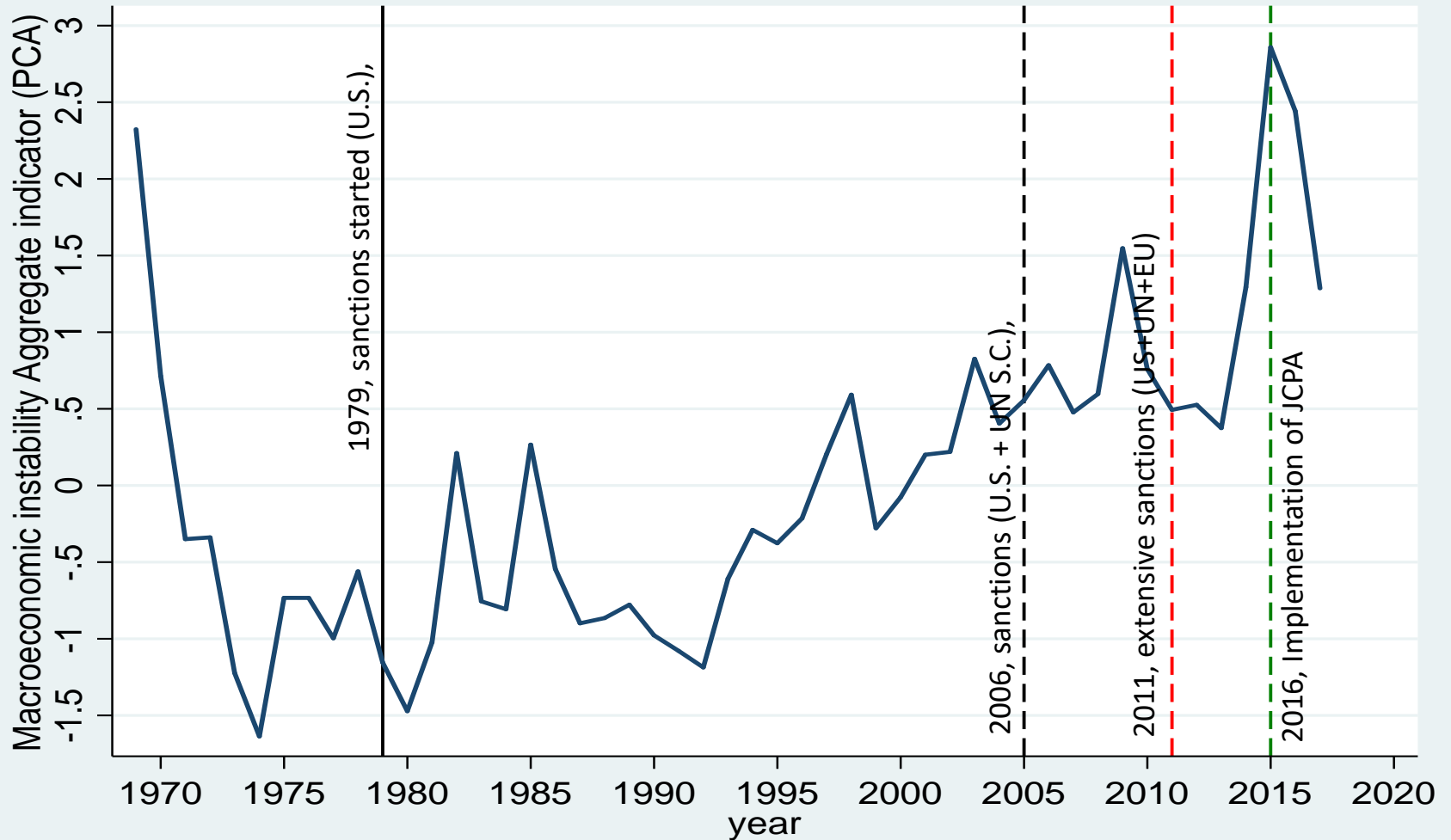
A- Iranian exports to China

B- Iranian exports to India

C- Iranian exports to Afghanistan



Sanctions effect on Macroeconomic instability Aggregate indicator (PCA)



The Estimation analysis

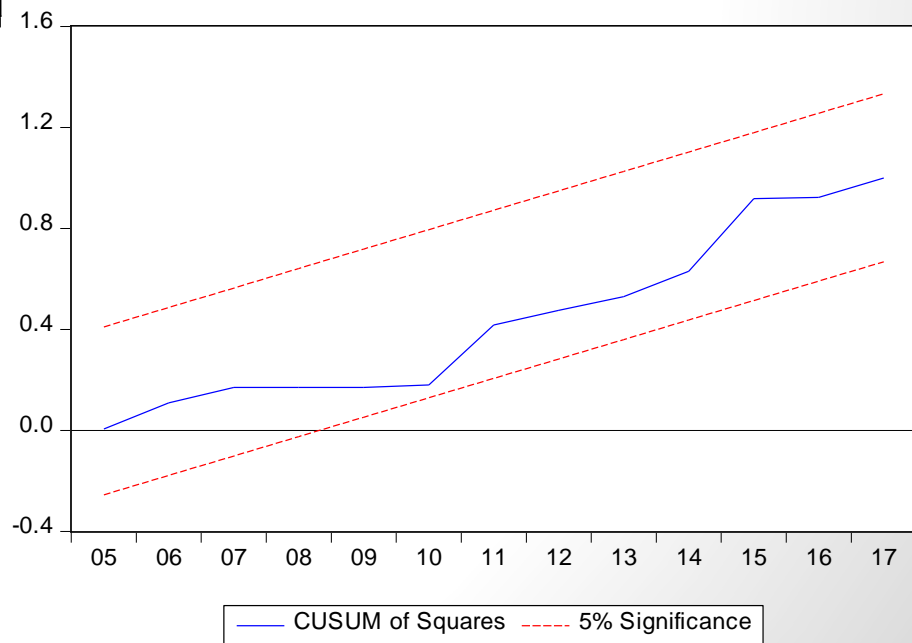
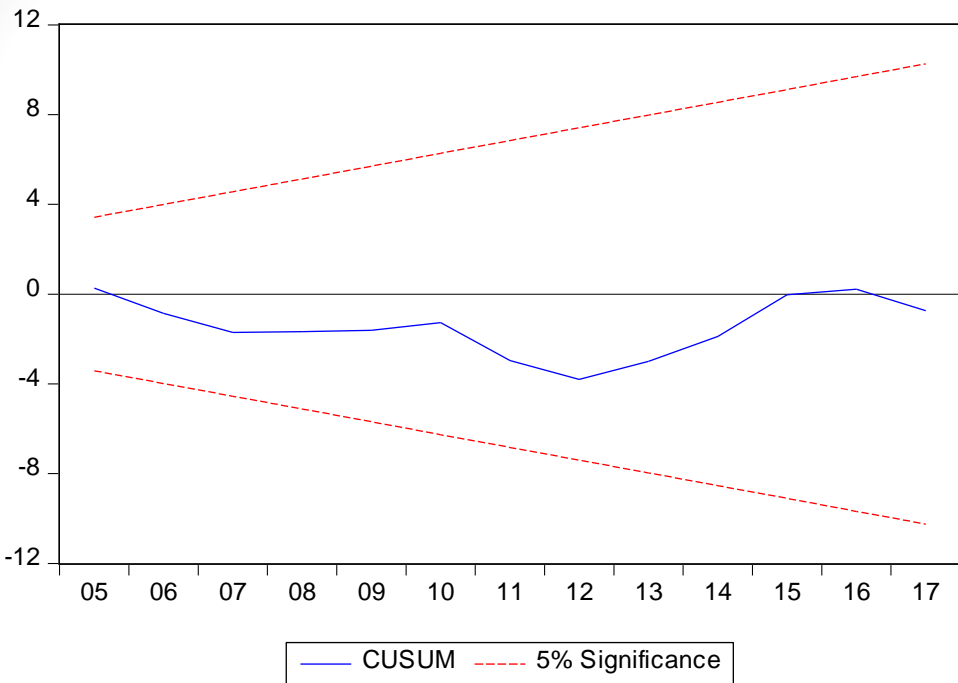
- The Estimation includes the following steps:
 1. **Estimate the degree of integration : (stationarity) unit-root tests:**
PP : Phillips-Perron, **ADF** : Augmented Dickey-Fuller & **KPSS** : Kwiatkowski-Phillips-Schmidt-Shin.
 2. **Estimated ARDL model**
 1. The “Impact multipliers” , the effect of the sanctions.
 2. The “total effect” , the long run multipliers (LRMs).
 3. The impulse response function.
 4. The error correction rate and equilibrium

The results of estimated optimal ARDL model, Selected Model: ARDL(4, 4, 3, 4,0,0,0,0)

| Variable | Coefficient | Prob.* |
|-----------------------|------------------|---------------|
| M(-1) | 0.277592 | 0.2459 |
| M(-2) | 0.237318 | 0.3496 |
| M(-3) | 0.083173 | 0.7843 |
| M(-4) | -0.490254 | 0.055 |
| LOILRENTD1 | -0.399154 | 0.2712 |
| LOILRENTD1(-1) | 0.30777 | 0.4742 |
| LOILRENTD1(-2) | 0.496152 | 0.246 |
| LOILRENTD1(-3) | 0.168329 | 0.6323 |
| LOILRENTD1(-4) | 0.712534 | 0.0422 |
| LGDP2D1 | 2.65627 | 0.0444 |
| LGDP2D1(-1) | -0.840821 | 0.5546 |
| LGDP2D1(-2) | 0.367139 | 0.796 |
| LGDP2D1(-3) | 1.92541 | 0.1382 |
| SANC | -0.054179 | 0.7995 |
| SANC(-1) | 0.47868 | 0.0379 |
| SANC(-2) | 0.129896 | 0.6825 |
| SANC(-3) | 1.021136 | 0.0093 |
| SANC(-4) | -0.843571 | 0.0271 |
| POLITY2 | 0.024532 | 0.212 |
| WAR | -0.052199 | 0.8837 |
| LFDI1D1 | -0.002555 | 0.6816 |
| LMILITARY1D1 | -0.110134 | 0.7102 |

| | |
|--------------------|----------|
| R-squared | 0.957061 |
| Adjusted R-squared | 0.884396 |
| F-statistic | 13.17083 |
| Prob(F-statistic) | 0.000011 |
| Durbin-Watson stat | 2.027476 |

Stability Diagnostics



1. Short-Run Effects (Impact Multipliers)

| Variable | Coefficient | Prob.* |
|-----------------|----------------|---------------|
| SANC | -0.0541 | 0.7995 |
| SANC(-1) | 0.4786 | 0.0379 |
| SANC(-2) | 0.1298 | 0.6825 |
| SANC(-3) | 1.0211 | 0.0093 |
| SANC(-4) | -0.8435 | 0.0271 |

2. Long-Run Effects (Long-Run Multipliers (LRM))

| Variable | Coefficient | Prob. |
|----------|-------------|--------|
| SANC | 0.820428 | 0.0002 |

3. The error correction rate and equilibrium

| | | |
|--------------|----------|--------|
| CointEq(-1)* | -0.89217 | 0.0008 |
|--------------|----------|--------|

Effectiveness of Sanctions on Iran

Effect on Iran's Nuclear Program Decisions and Intentions

- Although it has complicated Iran's efforts to acquire key equipment for its program, Iran's nuclear programs clearly were able to advance despite sanctions.
- Iran continues to expand the scale and reach of its ballistic missile arsenal through creating front companies, changing supplying countries, and engaging in other activities to hide procurement.
- Sanctions have eroded the aspects of Iran's conventional capabilities, but Iran's domestic arms industry has grown over decades, partially mitigating the limited foreign supplies of weaponry.
- Iran's acceptance of the JPA and progress in the talks on a comprehensive nuclear agreement are evidence that sanctions helped produce a shift in Iran's nuclear policies.

Effectiveness of Sanctions on Iran

Effects on Iran's Defense Capabilities

- Only multilateral sanctions can hinder the military ambitions of Iran significantly. Multilateral sanctions in place reduce Iran's military spending about 77 % in the long run.
- The intensity of sanctions is important in alleviating Iran's military expenditure. Moreover, while the multilateral sanctions have significant negative impacts on military spending, the impact of US unilateral sanctions is not significant.

Effectiveness of Sanctions on Iran

Effects on Iran's Regional Influence

- Neither sanctions nor oil prices appear to have materially reduced Iran's ability to arm militant movements in the Middle East.
- Iran continues to provide military equipment and advisers to the embattled governments of Syria and Iraq, especially after the mess in the region, following the Arab uprising in 2011.
- Iran maintained weapons exportation to the Shiite Houthi faction in Yemen and radical Shiite factions in Bahrain in a way that promotes the expected confrontation with Saudi Arabia as a part of the Sunni- Shia proxy conflict in the region.

UNITED STATES

Tehran will seek to commit Washington to the nuclear deal and avoid new sanctions – but not at the cost of giving up regional influence or ballistic missiles.

EUROPE

President Hassan Rouhani will prioritise good relations with the EU to protect the nuclear agreement, but European banks and investors will hold back, fearing US policy shifts.

RUSSIA

Military cooperation with Moscow in Syria will only partly mask significant differences of interest. However, Russia will generally back Iran at the UN Security Council.

⚠️ INTERVENTIONS

IRAQ

Since 2003, Tehran has been an arbiter in Baghdad politics, backing powerful Shia militias. It will resist the upcoming Kurdish independence bid, fearing spillover.

SYRIA

IRGC-backed militias including Lebanese Hezbollah will play a crucial ongoing role in supporting President Bashar al-Assad, and are likely to expect an economic payoff.

YEMEN

Tehran's support for Huthi militants will be modest, but is a low-cost means of disadvantaging Riyadh both politically and militarily.

TURKEY

Ankara and Tehran will maintain key bilateral economic and energy relations, as well as a mutual interest in supporting Qatar, despite tensions in Iraq and Syria.

ISRAEL

Deep Israeli suspicions of Iran will influence US policy and potentially provoke cross-border interventions against pro-Tehran groups in Syria, Lebanon or Gaza.

SAUDI ARABIA

Sunni-Shia proxy confrontation across the Middle East will be more important to Riyadh and its Gulf allies than it is to Tehran, which prioritises the global stage.

ASIA

Iran will court Chinese and Indian investors. Border tensions with Pakistan and Afghanistan over environmental and security issues will be contained.

Conclusion

- Economic pressure and financial isolation have hurt the Iranian economy by successive sanctions, which leads to a shift in the foreign policy of the Iranian regime.
- Sanctions have produced some political changes in Iran; it empowered the most moderate candidate, Rouhani, for two election rounds.
- Sanctions had some negative impact on the ambition of the Iranian nuclear program; however, the effect was limited through Iran's ability to figure out alternative solutions.
- The fragile political and military situations in the Middle East after the Arab Spring strengthen the Iranian role in the region regardless of sanctions.
- The effects of the sanctions were strongly linked to the low impact of oil prices and the severity of sanctions itself.



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