

Discussion of "The Price of War"

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The Paper

What is the cost of war?

Crucial object to quantify - sufficient statistic in models of **rationalist war**.

- Most of our understanding comes from WWII or UK/US.
- Biased towards rich developed countries.

How does the shock travel?

1. Contiguity: refugees, destruction.
2. **Trade links**: exports and imports.

The Paper: large dataset for 150 years and 60 countries.

- Data on war sites, belligerents, and trade links.

Empirical Design

$$\begin{aligned} y_{i,t+h} - y_{i,t} = & \zeta_h' X_{i,t} + \sum_{c \in \{S, B, T\}} \phi_{c,h}(\gamma_{i,c,t} \cdot \text{Sites}_t) \\ & + \sum_{c \in \{B, T\}} \psi_{c,h}(\epsilon'_{i,c,t-1} \cdot \text{Sites}_t) + u_{i,t+h} \end{aligned}$$

Empirical Design

$$\underbrace{y_{i,t+h} - y_{i,t}}_{\text{Country x Year level}} = \zeta'_h X_{i,t} + \sum_{c \in \{S, B, T\}} \phi_{c,h}(\gamma_{i,c,t} \cdot \text{Sites}_t) \\ + \sum_{c \in \{B, T\}} \psi_{c,h}(\epsilon'_{i,c,t-1} \cdot \text{Sites}_t) + u_{i,t+h}$$

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Empirical Design

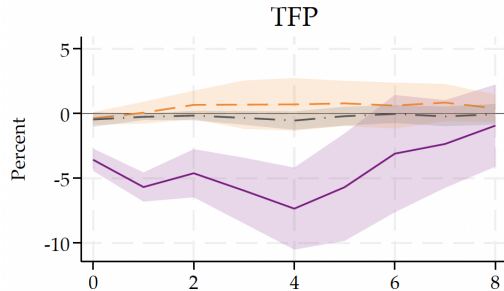
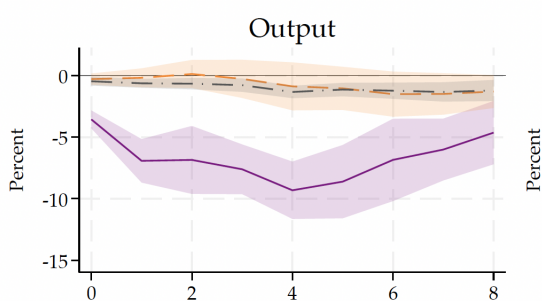
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- Local projections + joint estimation of direct effects and spillovers.
- Authors are careful not to give this a causal interpretation.
- **But I will** - wars rarely take place because of economic conditions.

- Best predictor of war today is war yesterday.

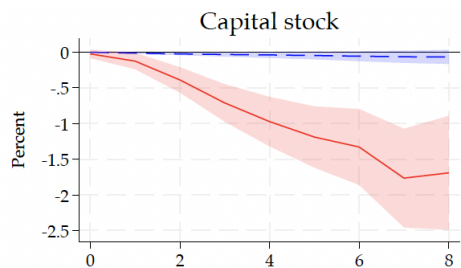
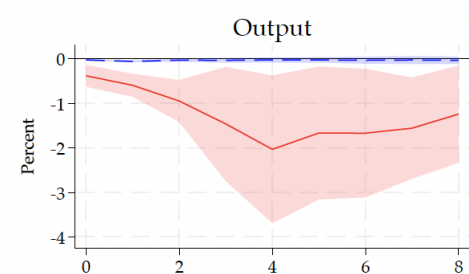
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Result 1 - war depresses real economy with slow recovery



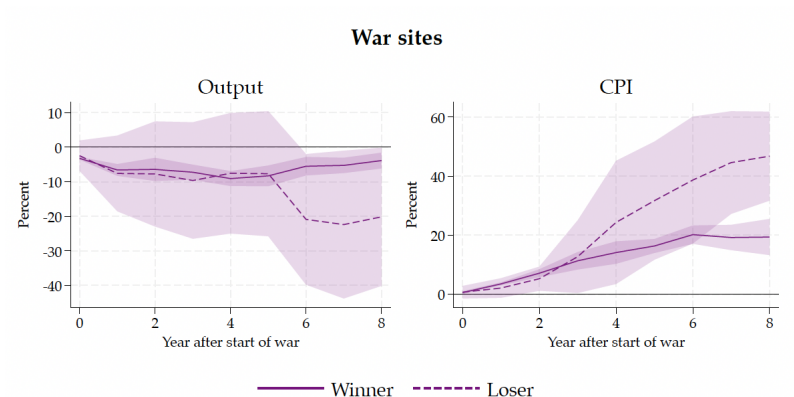
- Output does not go back to pre-war level due to decline in K .
- CPI also jumps but stabilizes around year 6.
- Stock returns $\downarrow$ and interest rates $\uparrow$.

Result 2 - exposure to war leads to large decline in real activity



- TFP increases.
- Exports and imports decline.

Result 3 - losers suffer more than winners



- Particularly when it comes to the price level.

Spillovers - trade or distance?

Paper documents **large effects on countries with trade links to war sites.**

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But trade flows are shaped by **geography**:

- **Distance**, language, and historical ties all affect bilateral trade.
- Same variables can also affect independent spillovers.

→ Need to separate spillovers from *trade* from spillovers from *geography*.

Solution: control for the path of **distance spillovers**.

- Pick up exposure based on *comparative advantage*.

Spillovers - why does the capital stock decline?

In trade models,

$$Y = \underbrace{A}_{\text{TFP}} \times \underbrace{G}_{\text{gains from trade}} \times F(K, L)$$

Effects on marginal product of capital:

1. TFP increases $\implies \text{MPK} \uparrow \implies K \uparrow$.
2. Imports decline $\implies G \downarrow \implies \text{MPK} \downarrow \implies K \downarrow$

→ **Trade effect dominates.**

Sharp evidence of why **exposure to war matters**:

- Disruption of trade links leads to drop in capital stock and in **output**.
- Consistent with investment rate below depreciation.

Why does the price level increase?

My explanation: war leads to **high deficits**.

- War leads to expansion of military spending $\implies G \uparrow$.
- Lower economic activity lowers T .
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Benmelech and Monteiro (2025)

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$\implies$ **P must increase to make the budget constraint hold.**

- Worse for losers as they capture no surplus.

This leads to a **nominal depreciation**.

- Effects on real exchange rate depend on passthrough.

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Possibility 2: persistent/permanent drop in physical capital.

- Consistent with data: K is over 4% lower 8 years after war.
- Interesting pattern: **$MPK \uparrow$ and investment does not increase**.
- Moreover, equity returns $\downarrow$ which should not happen in a recovery.

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Then, why does K remain low?

Why is capital low after a war?

Persistent mechanisms that can slow reconstruction:

1. Financial frictions

- Wars may cause a credit crunch.
- Value of collateral collapses and risk premia rise.

2. External cost of borrowing is high

- Wartime financing leads to inflation which leads to nominal depreciation.
- Makes cost of foreign funds high, which raises cost of capital.

3. Price of capital is high

- Reconstruction requires importing capital.
- Nominal depreciation makes cost of capital high.

How do countries recover from a war?

This is the "good news" - **TFP recovers fast.**

8 years after

$$\underbrace{d \log Y}_{-5\%} = \underbrace{d \log A}_0 + \alpha \underbrace{d \log K}_{-5\%} + (1 - \alpha) d \log L$$

and so $d \log L = -5\%$.

But population only declines 0.1% and increase in military personnel dies out.

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2. **Human capital** decline due to *brain drain*.
3. Also, depreciation + low investment in human capital.

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What are the consequences of war for human capital?

Final Thoughts

I really like this paper!

- Unfortunately, a **first-order question**.
- Does everything: excellent data work, clever empirics, sharp analysis.
- Macro + Trade + Political Economy - and all done well.

Main contribution: wars may be contained, but its consequences are not.

- War shock travels through trade links.
- And leads to persistent drop in capital stock.
- Opens the door to questions about the role of trade networks in conflict.