

Online Appendix for *Dynamism with incommensurate development: The distinctive Indian model**

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A Appendix

A.1 Timeline of reforms

Figure [A.1](#) provides a broad overview of the key reforms and economic in the recent economic history of India, as discussed in main text of the paper.

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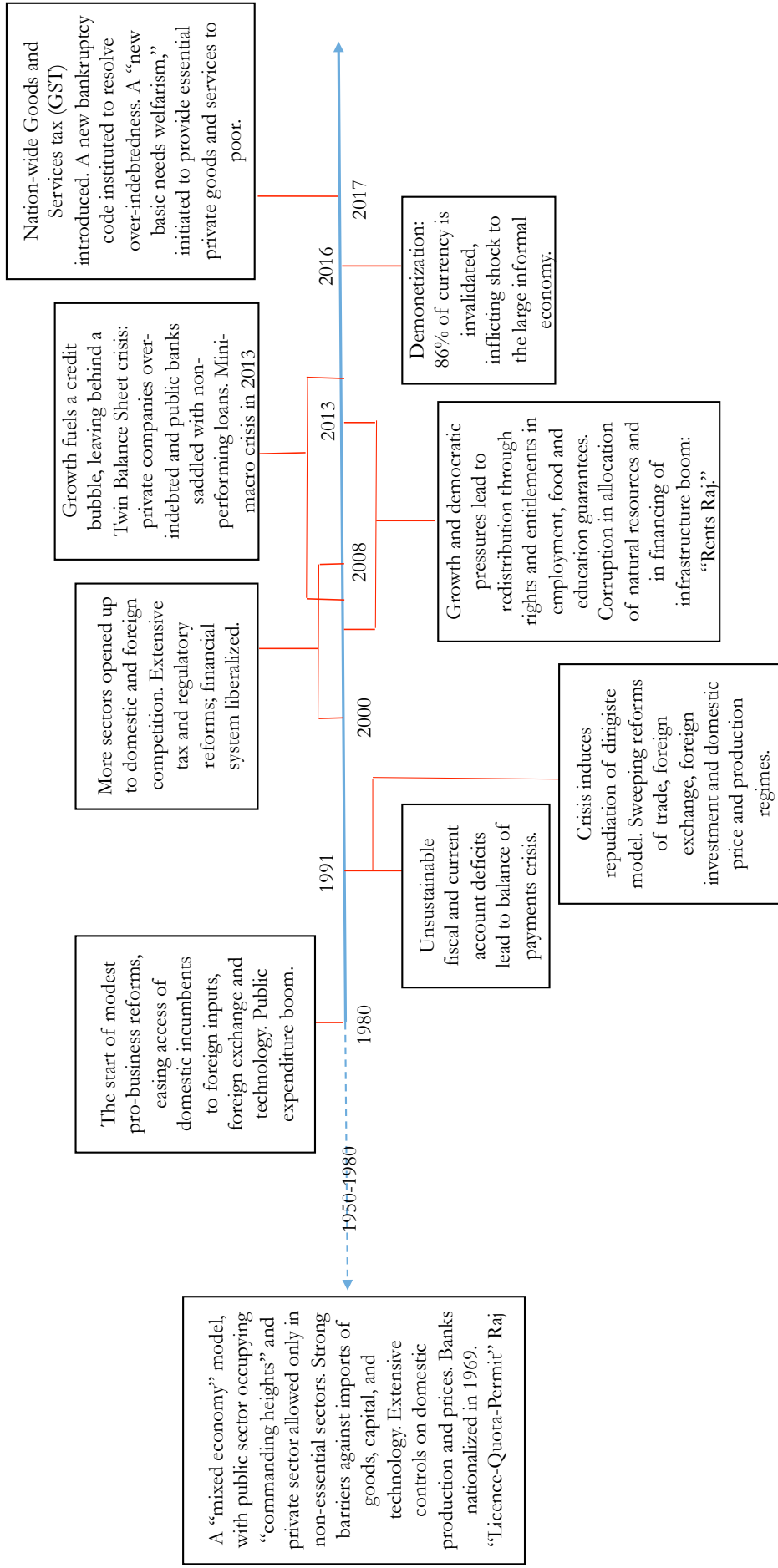


Figure A.1: Timeline of reforms

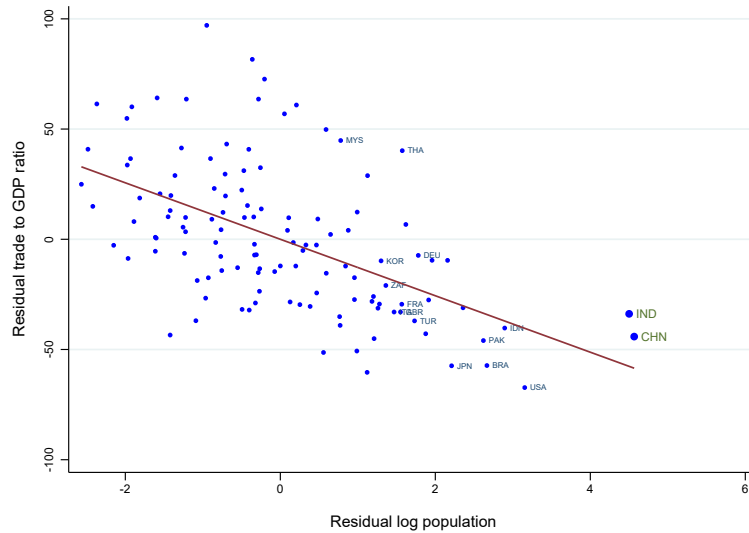


Figure A.2: India is a positive outlier in a gravity model on trade openness

A.2 A trade puzzle

Surprisingly, India’s unusual specialization has not affected its trade openness. This puzzle is compounded by the fact that India’s trade policies in goods and services are –and have been– amongst the most restrictive in the world. India has amongst the highest most-favored-nation tariffs in goods and [Borchert, Gootiiz, and Mattoo \[2014\]](#) document the same for trade in services. But trade openness is also determined by a country’s level of development (as countries become richer they trade more, partly by liberalizing trade policies). Crucially, the gravity model of trade strongly predicts that trade openness is also determined by country size– larger countries trade less than smaller ones ([Anderson and Wincoop \[2003\]](#)).

India’s trade-GDP ratio (41 percent in 2015-17 and including goods and services), a standard measure of openness, is greater than that of comparable large economies such as China (38 percent), Brazil (25 percent), Indonesia (40 percent), United States (27 percent) and Japan (34 percent). [Figure A.2](#) provides a general illustration of this finding. It plots the ratio of trade in goods and services to GDP (y-axis) against a measure of size (population) after controlling for a country’s level of development. The relationship is downward sloping as the gravity model predicts and India is a clear positive outlier (well above the line of best fit). It is true that India’s unusual specialization in services has made its trade in services exceptionally high. But even in goods and manufacturing which Indian policies penalized, trade openness remains normal and India is above the line of best fit across countries.

References

J. E. Anderson and E. v. Wincoop. Gravity with gravitas: A solution to the border puzzle. *American Economic Review*, 93(1):170–192, 2003.

I. Borchert, B. Gootiiz, and A. Mattoo. Policy barriers to international trade in services: Evidence from a new database. *World Bank Economic Review*, 28(1):162–188, 2014.