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Why did the Tariff–Growth Correlation Change after 1950?

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Abstract

This article uses a new database to establish a key finding: high tariffs were associated with fast growth before World War II, while they have been associated with slow growth thereafter. The paper offers explanations for the sign switch by controlling for novel measures of the changing world economic environment. Rejecting alternative explanations based on changing export market growth or transportation cost declines, it shows how the modern negative correlation could be reversed in a world environment characterized by a moderately higher generalized tariff protection such as that which prevailed before 1914. We show that an increase in average tariff rates among trading partners by just one third might suffice to reverse any negative relationship between an average country's tariffs and its growth. An increase in own tariffs after 1950 hurt or at least didn't help growth, but it might have helped growth in a world where average trading


partners' tariffs were moderately higher and retaliation was the best strategy. The world environment matters. Leader-country reaction to big world events matters.

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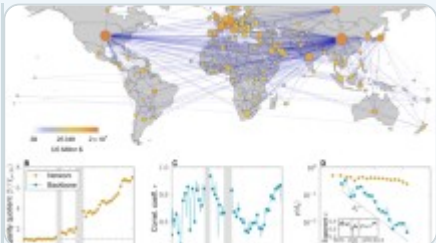
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References

Anderson, J. E. (1998). 'Trade Restrictiveness Benchmarks,' *Economic Journal* 108(July), 1111–1125.

Anderson, J. E., and J. P. Neary. (1994). 'Measuring the Restrictiveness of Trade Policy,' *World Bank Economic Review* 8(May), 151–169.

Anderson, T. W., and C. Hsiao. (1981). 'Estimation of Dynamic Models with Error Components,' *Journal of the American Statistical Association* 76, 598–606.

[Google Scholar](#)

Bagwell, K., and R. W. Staiger. (2002). *The Economics of the World Trading System*. Cambridge, MA: MIT Press.

[Google Scholar](#)

Bairoch, P. (1972). 'Free Trade and European Economic Development in the 19th

Century,' *European Economic Review* 3(November), 211-245.

Baldwin, R. E., and R. Forslid. (2000). 'Trade Liberalisation and Endogenous Growth: A q -Theory Approach,' *Journal of International Economics* 50, 497-517.

[Google Scholar](#)

Ben-David, D., and M. B. Loewy. (1998). 'Free Trade, Growth, and Convergence,' *Journal of Economic Growth* 3, 143-170.

[Google Scholar](#)

Bhagwati, J., and A. O. Krueger (eds.). (1973-1976). *Foreign Trade Regimes and Economic Development*, multiple volumes with varying authorship. New York: Columbia University Press.

[Google Scholar](#)

Blattman, C., M. A. Clemens, and J. G. Williamson. (2002). 'Who Protected and Why? Tariffs the World Around 1870-1937.' Paper presented to the *Conference on the Political Economy of Globalization*, Trinity College, Dublin (August 29-31).

Bloom, D. E., and J. G. Williamson. (1998). 'Demographic Transitions and Economic Miracles in Emerging Asia,' *World Bank Economic Review* 12(September), 419-455.

Capie, F. (1983). 'Tariff Protection and Economic Performance in the Nineteenth Century.' In J. Black and L. A. Winters (eds.), *Policy and Performance in International Trade*. London: Macmillan.

[Google Scholar](#)

Coatsworth, J. H., and J. G. Williamson. (2002). 'The Roots of Latin American Protectionism: Looking Before the Great Depression.' NBER Working Paper 8999,

National Bureau of Economic Research, Cambridge, MA (June).

[Google Scholar](#)

Dixit, A. (1987). 'Strategic Aspects of Trade Policy.' In Truman F. Bewley (ed.), *Advances in Economic Theory: Fifth World Congress*. New York: Cambridge University Press.

[Google Scholar](#)

Dollar, D. (1992). 'Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-1985,' *Economic Development and Cultural Change* 40(April), 523-544.

Dollar, D., and A. Kraay. (2001). 'Trade, Growth, and Poverty.' World Bank Policy Research Department Working Paper No. 2615, Washington, D.C. (March).

Easterly, W. (1993). 'How much do Distortions Affect Growth?' *Journal of Monetary Economics* 32(2), 187-212.

[Google Scholar](#)

Eckes, A. (1995). *Opening America's Market: U.S. Foreign Trade Since 1776*. Chapel Hill: University of North Carolina Press.

[Google Scholar](#)

Edwards, S. (1993). 'Openness, Trade Liberalization, and Growth in Developing Countries,' *Journal of Economic Literature* 31(September), 1358-1394.

Frankel, J., and D. Romer. (1999). 'Does Trade Cause Growth?' *American Economic Review* 89(June), 379-399.

Greenaway, D., W. Morgan, and P. Wright. (2002). 'Trade Liberalisation and Growth in Developing Countries,' *Journal of Development Economics* 67, 229–244.

[Google Scholar](#)

Grossman, G. M., and E. Helpman. (1991). *Innovation and Growth in the Global Economy*. Cambridge, MA: MIT Press.

[Google Scholar](#)

Hadi, A. S. (1992). 'Identifying Multiple Outliers in Multivariate Data,' *Journal of the Royal Statistical Society Series B* 54, 761–771.

[Google Scholar](#)

Hadi, A. S. (1994). 'A Modification of a Method for the Detection of Outliers in Multivariate Samples,' *Journal of the Royal Statistical Society Series B* 56, 393–396.

[Google Scholar](#)

Harrison, A. (1996). 'Openness and Growth: A Time-Series, Cross-Country Analysis for Developing Countries,' *Journal of Development Economics* 48, 419–447.

[Google Scholar](#)

Irwin, D. A. (1998). 'Changes in U.S. Tariffs: The Role of Import Prices and Commercial Policies?' *American Economic Review* 88(September), 1015–1026.

Irwin, D. A. (2001). 'Tariffs and Growth in Late Nineteenth Century America,' *World Economy* 24(January), 15–30.

Irwin, D. A. (2002). 'Did Import Substitution Promote Growth in the Late Nineteenth Century?' NBER Working Paper 8751, National Bureau of Economic Research, Cambridge, MA (February).

[Google Scholar](#)

Irwin, D. A., and M. Terviö. (2002). 'Does Trade Raise Income? Evidence from the Twentieth Century,' *Journal of International Economics* 58(1), 1-18.

[Google Scholar](#)

Judson, R. A., and A. L. Owen. (1999). 'Estimating Dynamic Panel Data Models: A Guide for Macroeconomists,' *Economic Letters* 65, 9-15.

[Google Scholar](#)

Krueger, A. O. (1983). 'The Effects of Trade Strategies on Growth,' *Finance and Development* 20(June), 6-8.

Krueger, A. O. (1984). 'Trade Policies in Developing Countries,' in Ronald Jones and Peter Kenan (eds.), *Handbook of International Economics*, Vol. 1. Amsterdam: North-Holland.

[Google Scholar](#)

Lane, P. R. (2001). 'International Trade and Economic Convergence: The Credit Channel,' *Oxford Economic Papers* 53, 221-240.

[Google Scholar](#)

Lewis, W. A. (1978). *The Evolution of the International Economic Order*. Princeton: Princeton University Press.

[Google Scholar](#)

Lindert, P. H., and J. G. Williamson. (2003). 'Does Globalization Make the World More Unequal?' In M. Bordo, Alan M. Taylor, and Jeffrey G. Williamson (eds.), *Globalization in Historical Perspective*. Chicago: University of Chicago Press for NBER.

[Google Scholar](#)

Nickell, S. (1981). 'Biases in Dynamic Models with Fixed Effects,' *Econometrica* 49, 1417-1426.

[Google Scholar](#)

O'Rourke, K. H. (1997). 'Measuring Protection: A Cautionary Tale,' *Journal of Development Economics* 53, 169-183.

[Google Scholar](#)

O'Rourke, K. H. (2000). 'Tariffs and Growth in the Late 19th Century,' *Economic Journal* 110(April), 456-483.

Osang, T., and A. Pereira. (1996). 'Import Tariffs and Growth in a Small Open Economy,' *Journal of Public Economics* 60, 45-71.

[Google Scholar](#)

Pritchett, L. (1996). 'Measuring Outward Orientation in LDCs: Can It Be Done?' *Journal of Development Economics* 49, 307-335.

[Google Scholar](#)

Pritchett, L., and G. Sethi. (1994). 'Tariff Rates, Tariff Revenue, and Tariff Reform: Some New Facts,' *The World Bank Economic Review* 8(1, January), 1-16.

[Google Scholar](#)

Rodríguez, F., and D. Rodrik. (2001). 'Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence.' In Ben Bernanke and Kenneth S. Rogoff (eds.), *Macroeconomics Annual 2000*, Cambridge, MA: MIT Press for NBER.

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Sachs, J. D., and A. Warner. (1995). 'Economic Reform and the Process of Global Integration,' *Brookings Papers on Economic Activity* 1, 1-118.

[Google Scholar](#)

Vamvakidis, A. (2002). 'How Robust Is the Growth-Openness Connection? Historical Evidence,' *Journal of Economic Growth* 7, 57-80.

[Google Scholar](#)

Williamson, J. G. (1998). 'Globalization, Labor Markets and Policy Backlash in the Past,' *Journal of Economic Perspectives* 12(Fall), 51-72.

[Google Scholar](#)

Williamson, J. G. (2003). 'Was It Stolper-Samuelson, Infant Industry or Something Else? World Tariffs 1789-1938.' NBER Working Paper 9656, National Bureau of Economic Research, Cambridge, MA (April).

[Google Scholar](#)

Wright, G. (1990). 'The Origins of American Industrial Success, 1879-1940,' *American Economic Review* 80(September), 651-668.

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