

Version 1.0 | Last updated 08 January 2017

Post-war Economies (Latin America)

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Latin American countries continued to pursue export-led growth after the First World War. However, the external environment was by then much less favourable. Export growth was therefore modest. Fiscal and financial policies became more orthodox after the war and this, coupled with the disappointing performance of the export sector, made it difficult to promote industry – especially in those countries where it had yet to take root. By the time of the Great Depression, no Latin American country had been able to escape from dependence on primary product exports. The region was therefore very vulnerable to the subsequent collapse of commodity prices.

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Introduction

The difficulties facing primary product exporters - in essence all [Latin American countries](#) - in the period after 1913 were intense even before prices collapsed in the late 1920s. In addition to the upheavals associated with the First World War, Latin American exporters experienced a particularly sharp decline in prices in the 1920-21 depression, as the world economy adjusted to peacetime

conditions. Prices and volumes recovered in the next few years, but over the entire period from 1913 to 1929, only a few countries saw an increase in their net barter terms of trade.

The main problem was the slow growth of world trade. In the sixteen years after 1913, annual growth in the dollar value of world exports barely exceeded 3 percent. The modest nature of this increase is underlined by the fact that much of it consisted of a rise in prices. Indeed, the annual increase in world trade volume was little more than 1 percent. This was an insufficient stimulus under normal conditions for those countries that were following export-led growth. As a result, progress towards industrialization in this period was modest.

The Export Sector

The slow growth of aggregate world trade did not mean that world demand for all commodities was growing slowly. However, of the twenty-two commodities that dominated Latin American exports at the time, only three (oil, cacao and rubber) recorded annual rates of increase in world volume above 5 percent between 1913 and 1928, and fifteen had rates of increase below 3 percent a year. Indeed, for six important Latin American commodities – silver, gold, rye, barley, cotton and wool – world production or exports in volume terms did not increase by more than 1 percent a year.^[1]

Faced with such difficult world trading conditions, Latin American republics had to choose from a number of different trade strategies.^[2] The first option was to rely on the commodity lottery. If the country's leading export was one of those facing fast growth in world demand, the value of exports would still rise rapidly provided that market share did not decline. Yet Latin America suffered a severe loss of market share in rubber and cacao, two of the three commodities that enjoyed rapid growth. Wild-rubber exports from Brazil and Bolivia collapsed in the face of exports of plantation rubber from the Far East; Brazil, Ecuador, Venezuela, the Dominican Republic and Haiti all lost market share to numerous European colonies in Africa, in which cacao exports were vigorously promoted. Only in the case of oil did the commodity lottery favour Latin America: The principal beneficiary was Venezuela, where oil had begun to be exported in the First World War, although Colombia, Ecuador, Peru and Argentina all reaped a modest harvest as well.^[3]

The second option was to increase market share in commodities for which world demand was growing modestly. For many decades, Latin American governments had been honing the tools at their disposal for promoting primary product exports, so this strategy was by no means impossible. Domestic prices and rates of return on capital for products traded in world markets could be altered through changes in exchange rates, export taxes, import tariffs and so forth, so a deterioration in the external (net barter) terms of trade did not necessarily imply a fall in the internal (rural–urban) terms of trade or in the profitability of exports.

In the period under consideration (1913-1929), there were sixty-one cases among the most important products for Latin America in which commodity exports changed their share of the world total by more than 0.5 percent. Market share increased in forty-one of these cases (more than two-

thirds). If cacao is excluded, market share increased in nearly three-quarters of all cases. This trade strategy was therefore a popular option. Indeed, in only four countries (Brazil, Ecuador, Haiti and Paraguay) did market share fail to increase in at least one case.^[4]

The strategy was fraught with problems, however. Although no one could reasonably have been expected to anticipate the depth of the depression at the end of the 1920s, the risk of agricultural protection in the Northern Hemisphere countries and imperial preference for their colonies was present for all to see. The market share strategy rendered many Latin American republics extremely vulnerable to changes in world trading conditions, and that vulnerability was simply reinforced by the risk of depression.^[5] By 1928, Argentina, Bolivia, Brazil, Chile, Cuba, Honduras and Mexico all controlled more than 20 percent of world exports in at least one commodity, and Argentina was a leading supplier to the world market in virtually all her exports.

The export boom was also associated with a significant loss of national control of the export sector in many countries. In those countries in which the value of exports grew at more than 5 percent a year between 1913 and 1929 (Colombia, the Dominican Republic, Honduras, Paraguay, Peru, Puerto Rico and Venezuela), foreign penetration of the export sector was particularly marked. These foreign investments occurred above all in commodities for which world demand was rising relatively rapidly, such as oil, copper, bananas and sugar. Coupled with an increase in market share for these products, the foreign-owned enclaves often acquired a dominant position. The extremely generous contract terms open to foreign investors at the time led to low tax yields and high profit remittances; this reduced the returned value associated with export growth in many countries and undermined the stimulus to the non-export sector associated with the export-led model.^[6]

The market share strategy was not successful in all cases. Indeed, a few Latin American republics failed even to raise export earnings in line with the growth of world trade in the sixteen years before 1929 – further confirmation of the pitfalls associated with the export-led model in the new international economic order constructed after the First World War. The unstable nature of commodity prices, the risk of disease and competition from synthetic products could all play havoc with export earnings, even in countries in which policy was determined primarily by the needs of the export sector.^[7]

Fiscal and Financial Systems

The export-led model, with its emphasis on growth in export value, was subject to strong cycles that reflected the fortunes of the export sector itself. The fiscal and financial systems, far from operating in a countercyclical fashion, reinforced the cycles that emanated from the export sector and contributed to the instability in exchange rates, prices and nominal incomes.

The fiscal system was typically procyclical. The value of imports tended to move in line with that of exports. Because such a high proportion of government revenue was derived from customs duties, government revenue and expenditure tended to move in line with external trade. At the same time,

any rise (fall) in the value of foreign trade was linked to a rise (fall) in the net output of sectors such as commerce and [transport](#) that depended on the movement of exports and imports. Thus the real economy also tended to move procyclically with the change in the nominal value of exports.^[8]

Changes in the value of exports were also highly correlated with changes in the money supply. As exports increased (decreased), foreign exchange flowed into (out of) the country. Because money of “external origin” tended to be such a high proportion of the total money supply in countries that followed export-led growth, it could not easily be offset by a decrease (increase) in money of “internal origin” through budget deficits or domestic credit creation.

Any hopes that the end to hostilities in Europe would eliminate the outstanding economic problems were undermined by the sharp depression in 1920-21. Although mercifully short, this trade-induced depression was a forceful reminder of the procyclical nature of the export-led model. The collapse of primary product prices in world markets once again induced an outflow of foreign exchange, a fall in the money supply, a reduction in imports and a decline in government revenue. Most dramatic of all was currency depreciation in almost all the republics without a fixed link to the U.S. dollar. Brazil and Ecuador, for example, saw the nominal value of their currencies halved between 1918 and 1923.^[9]

The extreme nature of export instability in the years after 1913 led governments in Latin America to look more favourably on financial and fiscal reforms that could eliminate some of the worst excesses of the export-led model. Currency instability was seen as one of the biggest problems, and the return to (or adoption of) fixed exchange rates became a symbol of the new orthodoxy. With the emphasis given to the gold standard by the newly formed League of Nations, Latin American republics came under pressure to join the system and play by the new rules.

The stabilization of exchange rates was usually associated with the adoption of the gold-exchange standard. This was much less demanding than the gold standard for peripheral countries because it was no longer necessary to guarantee the exchange of local currency for gold. Instead, the gold-exchange standard allowed countries to exchange local currency for a foreign currency, such as the dollar, which was in turn fully convertible into gold. Even so, the gold-exchange standard was not without its problems. Countries such as Honduras and Mexico, where silver coins were the preferred medium of exchange for historical reasons, suffered from the depreciation of silver in the 1920s as the gold price of silver started to rise. This led to a withdrawal of gold currency from circulation that could only be offset by increasing the coinage of gold and reducing that of silver.

The pre-war gold standard in Latin America had often broken down as a result of the suspension of gold outflows by the exchange office. In order to reduce this risk in the new postwar environment, exchange rate stability was buttressed by financial reform, with the creation of new banking institutions, financial supervision and bank regulation. The most striking example of this change was the creation of central banks in the Andean countries, many of which had been the least orthodox in exchange rate management before 1914.

The creation of these central banks was usually preceded by a visit from [Edwin W. Kemmerer](#)

(1875-1945), a U.S. academic and specialist in monetary economics.^[10] The Kemmerer missions were independent of the U.S. State and Treasury Departments, but both looked with favour on the financial and fiscal reforms invariably proposed by Kemmerer and his team. Indeed, a visit by Kemmerer was often seen as an essential precondition for future U.S. loans – even from the private sector – and Kemmerer on occasion lobbied hard for private sector loans to countries that adopted his package of reforms.

Financial reform in the 1920s was extremely orthodox. The main purpose was to provide an institutional framework that would underpin exchange rate stability and the gold-exchange standard. In practice it did not allow governments to operate countercyclical monetary policies, and techniques for sterilizing the impact of a surge of foreign exchange inflows on the money supply and on the domestic price level were extremely rudimentary. Although Great Britain and the United States enjoyed almost a decade of price stability after the 1920-21 depression, many Latin American countries suffered from severe price fluctuations even after the currency was stabilized.^[11]

The adoption of an exchange rate target had implications not only for the financial system but also for fiscal policy. Budget deficits, financed by inflationary methods, would undermine currency stability, so pressure to increase revenue was strong. However, the close dependence of revenue on the trade cycle meant that the tax base needed to be broadened in order to increase the stability of government income. Thus fiscal reform was needed to complement financial and currency reform.

An additional obstacle in the path toward fiscal reform was provided by external debt service payments. In the tense international context before, during and after the war a failure to meet debt service payments – owed mainly to European powers – could be interpreted as an excuse for European intervention in the Western Hemisphere. This potential challenge to the Monroe Doctrine had persuaded successive U.S. governments since the turn of the century to use their influence to ensure that debt service payments were made. The most effective way to do this was to insist that Latin American republics pledge their revenue from external trade to service their external debts; thus, in order to protect against any backsliding, U.S. officials were placed in the customs houses of many Latin American countries. Indeed, by the mid-1920s U.S. officials “had served or were serving in some supervisory capacity” in ten of the twenty republics.^[12]

The emphasis on debt service payments made it more difficult for governments to reduce their dependence on trade taxes because – unlike most other taxes – they could be paid in gold. Although wartime inflation had sharply reduced the share of total revenue derived from import duties, this share recovered quickly in the 1920s. By the end of the decade the contribution to total government income from trade taxes was not much lower than it had been in 1913, so revenue was still vulnerable to fluctuations in exports’ value. Fiscal reform had therefore been very timid, and it remained extremely difficult for governments to pursue countercyclical fiscal policies.

One reason for the timidity of fiscal reform was Latin American governments’ growing awareness that foreign loans were available to finance budget deficits in a noninflationary manner. The

emergence of the United States as a capital surplus country led to a substantial transfer of resources to Latin America in the form of loans to national, state, and municipal governments. Other capital exporting countries could not match the explosion of U.S. lending to Latin America, and by 1929 the [United States](#) had become the most important foreign investor in every Latin American republic except Argentina, Brazil, Paraguay, and Uruguay.^[13]

Industrialisation

By the time war broke out in Europe, modern manufacturing had already established itself in Argentina, Brazil, Chile, Mexico, Peru and Uruguay, and modest beginnings were visible in Colombia and Venezuela.^[14] Many factors contributed to the emergence of domestic industry geared to the home market. On the demand side, the creation of urban concentrations as a by-product of export-led growth produced expanding markets based on wage labour and a growing middle class. As the market increased, the unit cost of production fell, so local firms could compete more easily with imports across a broad range of tradable goods. Small republics, in which urban concentration was modest, were at a disadvantage, and modern factory production (excluding establishments engaged in processing [raw materials](#) for export) was extremely limited before the war.

The First World War shattered the “normal” environment in which modern manufacturing had arisen before 1914. The first big change was the decline in imports as a result of shipping and other difficulties. Cut off from competing imports, local industry no longer had to worry to the same extent about relative prices. In effect, tariffs on imports had been replaced by quotas, and domestic prices were free to rise until the market cleared. Import restrictions, however, applied to all products, and firms were frequently denied access to imports of capital goods to expand their capacity; thus in many cases demand had to be met by more intensive use of existing capacity, which was not always possible.^[15]

Just as the war years had brought a reduction in the import quantum, so too the return to peacetime conditions brought a flood of goods into the main Latin American markets. This increase in competing imports was not simply a reflection of a return to the pre-war situation; it was also due to the fact that the relative price of imports had fallen sharply as a result of the erosion of tariff rates. Domestic inflation in Latin America had undermined the protection given by the region’s specific tariffs to the point that by 1919, duties collected represented only 7.5 percent of imports in Argentina, 9.6 percent in Peru and 11.2 percent in Uruguay. Domestic firms could not compete with cheap imports. The textile industry in many countries saw a drop in output, and the situation for the import-competing sector was rescued only by the 1920-21 world depression, which forced Latin American countries to protect the balance of payments through exchange rate depreciation. The sharp drop in the price level also improved tariff protection, because the same specific tariffs were now collected on imports whose foreign currency price had fallen.^[16]

Although there were some industrial successes in the 1920s, there were also many

disappointments. The small republics – even the more prosperous ones – were in general unable to take even the first steps toward industrialization. Tariff increases were adopted in Cuba, Haiti and the Dominican Republic in the second half of the 1920s, but the main beneficiary was non-export agriculture, which was able to expand quickly at the expense of food imports. The decline of Mexico's export earnings after 1925, coupled with severe monetary contraction, contributed to the stagnation of industrial output, and textile production fell after 1926. The spectacular growth of Peruvian exports was much more modest when expressed in terms of returned value, and the stimulus to domestic production was further eroded by the failure of tariff rates to return to their pre-war level.

Brazil is the enigma whose industrial performance in the 1920s has excited the most attention. Coffee valorisation after the 1920-21 depression eventually stabilized export earnings, and the policy of export restrictions (on coffee) encouraged resources to move into other activities. Tariff protection in Brazil remained high, although it never reached pre-war levels, and foreign companies were sufficiently attracted by the captive home market (as in Argentina, Chile and Mexico) to establish branch plants in such products as automobiles, sewing machines, paper and tires. Yet a superficial reading of Brazilian industrial statistics can give the impression that industrial performance was not very dynamic, with cotton textile production in particular falling after 1922.

There can be little doubt that industrial output did not rise very rapidly in Brazil after the 1920-21 depression. The orthodox policies pursued in the middle of the decade in preparation for the re-adoption of the gold standard led to monetary contraction and to some extent counteracted the favourable stimulus from the terms of trade. Nevertheless, it would be wrong to conclude that industry was not dynamic. Output expanded rapidly from 1921 to 1923 and again from 1926 to 1928: Excluding cotton textiles, where ferocious international competition took its toll, industrial output rose by 55 percent between 1920 and 1929 – an annual rate of increase of 5 percent. Many new industries were established in the 1920s, including a number of firms making capital goods, and the iron and steel industry made some progress. Perhaps most important of all, imports of industrial equipment rose sharply in the 1920s, creating new industrial capacity and modernizing existing plants. Indeed, imports of industrial machinery hit a peak in 1929 – the last year before the Great Depression.

By the end of the 1920s, the industrial sector was still the junior partner in the export-led model throughout Latin America. Industrial output depended heavily on the home market – the brief surge in exports during the war had been reversed in the 1920s, as cheaper imports from Europe and North America again became available – and domestic demand was still closely linked to the fortunes of the export sector. Furthermore, industrial maturity was clearly correlated with past rates of export growth and the level of exports per person.^[17]

Argentina, the richest republic, was still in a class of its own in terms of industrial advance, with manufacturing accounting for nearly 20 percent of gross domestic product (GDP) at the end of the 1920s. Yet Argentina, despite its high level of net manufacturing output per head compared

unfavourably with its neighbours in terms of the share of total demand met by domestic manufactures. This ratio was lower than in Brazil, Chile or even Uruguay. This did not mean that Argentina was less industrialized than those countries – though many have made the mistake of assuming this to be so – but it did mean that Argentine industry had not been particularly successful in meeting the enormous demand for manufactured goods derived from its rapid export growth. The textile industry, capital goods and consumer durables were all less advanced than could legitimately be expected in a country of Argentina's wealth. Although the demand for industrial goods was strong, modest tariff protection, a social infrastructure geared to agricultural exports, a powerful rural elite and close ties with Great Britain – whose exports would have been the first to suffer from an increase in the output of import-competing industries in Argentina – robbed Argentine industrialists of some of the potential benefits that export-led growth might have brought.

Conclusion

Latin American countries entered the First World War with economies that were still very dependent on the export of primary products. The external context in which these commodities were traded became much less favourable during the war. This was seen at the time as a temporary setback, but it proved to be more permanent. Indeed, the period before the First World War now looks like a “golden age”.

Latin American countries had not sufficiently exploited this “golden age” to diversify their economies through industrialization and the development of related services. As a result, they were very vulnerable during and after the First World War to the deterioration in the external environment. The slow growth of exports in the 1920s made it difficult to foster manufacturing because of the latter's dependence on imported capital and intermediate goods. At the same time, public policy became much more orthodox so that governments lacked the instruments to promote industrialization. All this would start to change after 1929 as a result of the Great Depression.

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Notes

1. ↑ See Bulmer-Thomas, Victor: *The Economic History of Latin America since Independence*, Cambridge 2003, Chapter 6.
2. ↑ On the global environment, see Bértola, Luis / Williamson, Jeffrey: “Globalization in Latin America before 1940”, in: Bulmer-Thomas, Victor / Coatsworth, John / Cortés Conde, Roberto (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.

3. ↑ On Venezuela, see McBeth, Brian: *Juan Vicente Gómez and the Oil Companies in Venezuela. 1908-1935*, Cambridge 1983.
4. ↑ See Bulmer-Thomas, *Economic History* 2003, Chapter 6.
5. ↑ See de Paiva Abreu, Marcelo: "The External Context", in: Bulmer-Thomas / Coatsworth / Cortés Conde (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.
6. ↑ For case studies of Mexico and Peru, two of the most affected countries, see Maurer, Noel: *The Power and the Money. The Mexican Financial System, 1876-1932*, Stanford 2002, and Thorp, Rosemary / Bertram Geoffrey: *Peru, 1890-1977. Growth and Policy in an Open Economy*, London 1978.
7. ↑ For the Caribbean countries, where these problems were especially acute, see Bulmer-Thomas, Victor: *The Economic History of the Caribbean since the Napoleonic Wars*, Cambridge 2012.
8. ↑ See Cortés Conde, Roberto: "Fiscal and Monetary Regimes", in: Bulmer-Thomas / Coatsworth / Cortés Conde (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.
9. ↑ See Salvucci, Richard: "Export-Led Industrialization", in: Bulmer-Thomas / Coatsworth / Cortés Conde (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.
10. ↑ See Drake, Paul: *The Money Doctor in the Andes. The Kemmerer Missions, 1923-33*, Durham 1989.
11. ↑ For a case study of Argentina, see many of the chapters in della Paolera, Gerardo / Taylor, Alan (eds.): *A New Economic History of Argentina*, Cambridge 2003.
12. ↑ See Munro, Dana: *Intervention and Dollar Diplomacy in the Caribbean. 1900-21*, Princeton 1964.
13. ↑ See Stallings, Barbara: *Banker to the Third World. US Portfolio Investment in Latin America, 1900-86*, Berkeley 1987, and Taylor, Alan: "Foreign Capital Flows", in: Bulmer-Thomas/Coatsworth/Cortés Conde (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.
14. ↑ See Haber, Stephen: "The Political Economy of Industrialization", in: Bulmer-Thomas/Coatsworth/Cortés Conde (eds.): *The Cambridge Economic History of Latin America*, vol. II, Cambridge 2006.
15. ↑ See Albert, Bill: *South America and the First World War. The Impact of the War on Argentina, Brazil, Chile and Peru*, Cambridge 1988.
16. ↑ See Coatsworth, John / Williamson, Jeffrey: "Always Protectionist? Latin American Tariffs from Independence to Great Depression", in: *Journal of Latin American Studies* 36/2 (2004), pp. 205-32.
17. ↑ See many of the chapters in Yáñez, César / Carreras, Albert (eds.): (2012). *The Economies of Latin America*, London 2012.

Selected Bibliography

Albert, Bill: **South America and the First World War. The impact of the war on Brazil, Argentina, Peru, and Chile**, Cambridge; New York 1988: Cambridge University Press.

Bértola, L. / Williamson, J.: **Globalization in Latin America before 1940**, in: Coatsworth, John H. / Bulmer-Thomas, Victor / Cortés Conde, Roberto (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, volume 2, Cambridge 2006: Cambridge University Press.

Bulmer-Thomas, Victor: **The economic history of Latin America since independence**, New York 1994: Cambridge University Press.

Bulmer-Thomas, Victor: **The economic history of the Caribbean since the Napoleonic wars**, Cambridge 2012: Cambridge University Press.

Coatsworth, John H.; Williamson, Jeffrey G.: **Always protectionist? Latin American tariffs from independence to great depression**, in: Journal of Latin American Studies 36/2, 2004, pp. 205-232.

Cortés Conde, Roberto: **Fiscal and monetary regimes**, in: Bulmer-Thomas, Victor / Cortés Conde, Roberto / Coatsworth, John (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, volume 2, Cambridge 2006: Cambridge University Press.

Della Paolera, Gerardo / Taylor, Alan M. (eds.): **A new economic history of Argentina**, Cambridge; New York 2003: Cambridge University Press.

Drake, Paul W.: **The money doctor in the Andes. The Kemmerer missions, 1923-33**, Durham 1989: Duke University Press.

Haber, S.: **The political economy of industrialization**, in: Bulmer-Thomas, Victor / Cortés Conde, Roberto / Coatsworth, John H. (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, volume 2, Cambridge 2006: Cambridge University Press.

Maurer, Noel: **The power and the money. The Mexican financial system, 1876-1932**, Stanford 2002: Stanford University Press.

McBeth, B. S.: **Juan Vicente Gómez and the oil companies in Venezuela, 1908-1935**, Cambridge; New York 2002: Cambridge University Press.

Munro, Dana Gardner: **Intervention and dollar diplomacy in the Caribbean, 1900-1921**, Princeton 1964: Princeton University Press.

Paiva Abreu, M. de: **The external context**, in: Bulmer-Thomas, Victor / Coatsworth, John H. / Cortés Conde, Roberto (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, volume 2, Cambridge; New York 2006: Cambridge University Press.

Salvucci, R.: **Export-led industrialization**, in: Bulmer-Thomas, Victor / Cortés Conde, Roberto / Coatsworth, John H. (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, Cambridge 2006: Cambridge University Press.

Stallings, Barbara: **Banker to the third world. US portfolio investment in Latin America, 1900-1986**, Berkeley 1987: University of California Press.

Taylor, A.: **Foreign capital flows**, in: Bulmer-Thomas, Victor / Cortés Conde, Roberto / Coatsworth, John H. (eds.): The Cambridge economic history of Latin America. The long twentieth century, volume 2, Cambridge 2006: Cambridge University Press.

Thorp, Rosemary / Bertram, Geoffrey: **Peru, 1890-1977. Growth and policy in an open economy**, New York 1978: Columbia University Press.

Yáñez Gallardo, César / Carreras, Albert (eds.): **The economies of Latin America. New cliometric data**, London 2012: Pickering & Chatto.

Citation

Bulmer-Thomas, Victor: Post-war Economies (Latin America) , in: 1914-1918-online. International Encyclopedia of the First World War, ed. by Ute Daniel, Peter Gatrell, Oliver Janz, Heather Jones, Jennifer Keene, Alan Kramer, and Bill Nasson, issued by Freie Universität Berlin, Berlin 2014-10-08.

DOI: [10.15463/ie1418.10365](https://doi.org/10.15463/ie1418.10365).

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