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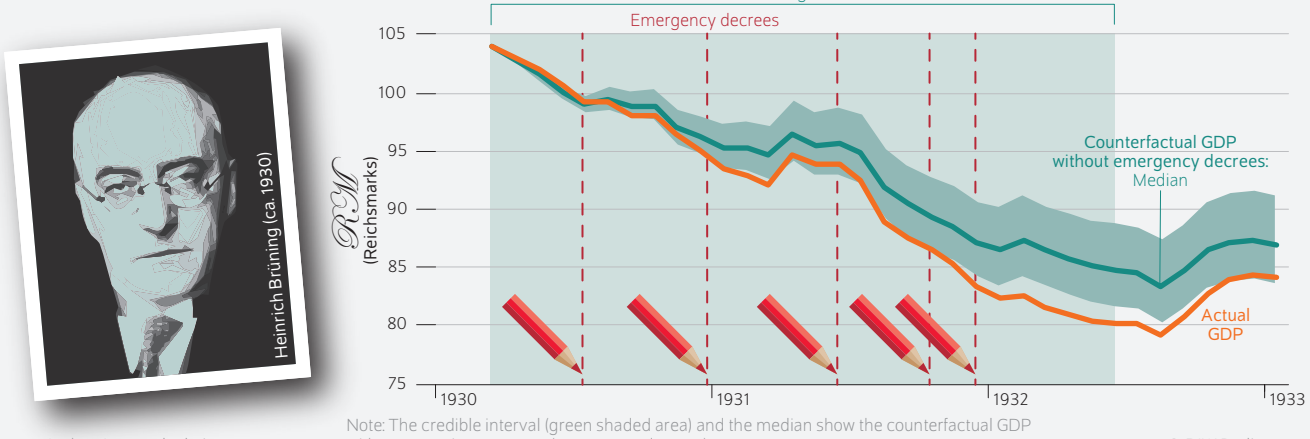
AT A GLANCE

Brüning's austerity policies of the early 1930s intensified the economic slump and increased unemployment

By Stephanie Ettmeier and Alexander Kriwoluzky

- Initial quantification of the economic impact of Heinrich Brüning's austerity policies between 1930 and 1932
- Using new revenue and spending data and an austerity shock series from historical sources, casual effects can be identified
- Compared to the reference year 1932, Brüning's measures caused a 4.5-percent slump in GDP
- Between January and June 1932, the effects of the emergency decrees resulted in an additional 3.31 million unemployed
- Calls for fiscal austerity in response to increased debt levels in Europe should be evaluated with this history in mind

Brüning's austerity policies increased the decline in GDP by an additional 4.5 percent



Source: Authors' own calculations.

Note: The credible interval (green shaded area) and the median show the counterfactual GDP without austerity measures (emergency decrees).

FROM THE AUTHORS

Our analysis of Brüning's austerity policies, one of the most consequential austerity interventions in recent history, provides further evidence of the negative impact of such measures on the economy. Countries cannot simply save their way out of a recession.
— Stephanie Ettmeier —

MEDIA

Audio Interview with Stephanie Ettmeier (in German)
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Brüning's austerity policies of the early 1930s intensified the economic slump and increased unemployment

By Stephanie Ettmeier and Alexander Kriwoluzky

ABSTRACT

May 2022 marked the 90th anniversary of the end of Heinrich Brüning's term as Reich Chancellor. To this day, the economic effects of Brüning's extreme austerity measures remain unclear. However, new data and calculations have made an initial quantification of the economic consequences of Brüning's policies possible. An analysis based on a time series model illustrates how the Weimar Republic's economy could have developed without Brüning's austerity measures. According to this model, real GDP fell by around 4.5 percent overall in the reference year 1932 and unemployment rose sharply as a result of Brüning's emergency decrees. Considering this analysis, current calls for fiscal austerity to reduce debt should be questioned.

German government debt has risen sharply since 2020 due to the pandemic-related fiscal measures. In 2021, the debt rate was nearly 64 percent, above the reference value of 60 percent of GDP as laid out in the Maastricht criteria. The situation is similar in other European countries: For example, Italy's debt rate is over 150 percent, while Greece's has reached 193 percent. It is clear that a return to the rules of the unreformed Stability and Growth Pact, as called for by some, would make dramatic austerity policies[1] inevitable for many Member States. A number of studies have shown how counterproductive austerity policies were for Greece and other heavily indebted Southern European countries during the debt crisis.[2]

The situation of the Weimar Republic in the early 1930s under Brüning and his fiscal austerity can be illustrative and informative when evaluating the impact of such policies. At the time, the Weimar Republic was experiencing an economic crisis as well as a high level of debt due to World War I reparations. In response, Brüning issued five emergency decrees between 1930 and 1932 that included tax increases and drastic wage and pension cuts, especially for civil servants. This earned Brüning the nickname "the Hunger Chancellor" (*Hungerkanzler*) (Box 1). The decline in government spending shows the true extent of the cuts: In the 1931/1932 fiscal year,[3] spending fell by more than one fifth compared to the previous fiscal year.

The emergency decrees were issued while the Weimar Republic was in the midst of an economic crisis (Figure 1). The economic situation had been worsening since 1928: GDP had begun to sink (green line) before Brüning's term (green shaded area) and unemployment increased rapidly

1 Austerity is an economic policy course of spending cuts and/or tax increases with the goal of reducing government budget deficits.

2 Cf. Mathias Klein, "Niedriges Zinsniveau verstärkt negative Effekte der Austeritätspolitik," *DIW aktuell*, no. 7 (2018) (in German; available online. Accessed on June 7, 2022); Philipp Engler and Mathias Klein, "Austerity Measures Amplified Crisis in Spain, Portugal, and Italy," *DIW Economic Bulletin*, no. 8 (2017) (available online. Accessed on June 2, 2022. This applies to all other online sources in this report unless stated otherwise).

3 A fiscal year is from April 1 to March 31 of the following year. The fiscal year 1931/1932 was from April 1, 1931 to March 31, 1932.

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Box 1

Brüning's emergency decrees

Heinrich Brüning implemented his austerity policies via a total of five emergency decrees:

July 26, 1930: The July 1930 emergency decree was the first in a series of extreme spending cuts and tax increases. Among other measures, it introduced an additional income tax for civil servants and tightened eligibility criteria for social benefits. Furthermore, unemployment insurance contributions were increased.

December 1, 1930: The second decree imposed further salary and pension cuts for civil servants and reduced unemployment and health insurance benefits. Moreover, existing taxes' (such as the income tax) rates were raised and new taxes, like the beer tax or citizens' tax, were introduced.

June 5, 1931: The third decree imposed a crisis tax as well as a further pay cut for civil servants. Unemployment insurance benefits and crisis aid were reduced by five percent. Similarly, the eligibility period for unemployment benefits was extended and the children's allowance was reduced.

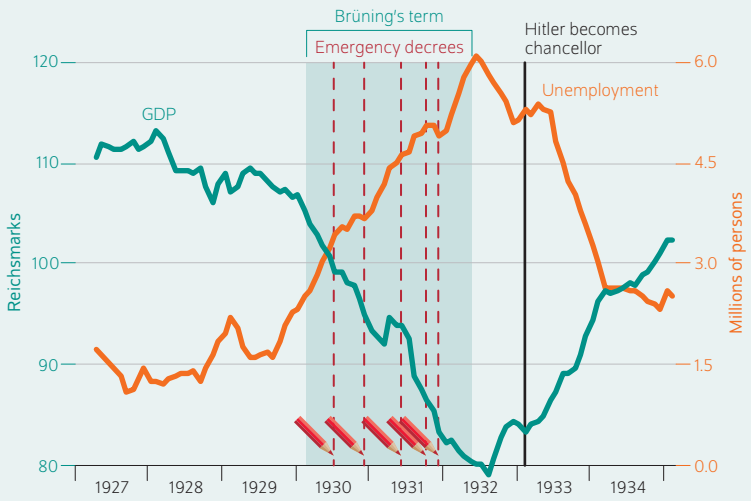
October 6, 1931: The fourth decree included further salary cuts for civil servants and increased unemployment insurance contributions. The eligibility period for unemployment benefits was reduced and the eligibility age for social benefits was increased. In addition, a construction freeze on public buildings was announced and extensive pension cuts for civil servants were initiated.

December 8, 1931: The final emergency decree decreased civil servants' wages once again and cut other wages to the 1927 level. In addition, the eligibility period for unemployment insurance was reduced to a maximum of twenty weeks.

Figure 1

Real GDP per capita and unemployment in Germany between April 1927 and February 1935

Real GDP per capita in Reichsmarks (left axis) and seasonally-adjusted unemployment in millions of persons (right axis)



Notes: The light green shaded area represents Brüning's term. The red vertical lines mark the dates of the emergency decrees (July 26, 1930; December 1, 1930; June 5, 2931; October 6, 1931; and December 8, 1931). The black vertical line marks the beginning of Hitler's term as chancellor in January 1933.

Source: Thilo Nils Hendrik Albers, "The prelude and global impact of the Great Depression: Evidence from a new macroeconomic dataset," *Explorations in Economic History*, vol. 70 (2018): 150–163 (available online), Detlev Humann, *"Arbeitsschlacht": Arbeitsbeschaffung und Propaganda in der NS-Zeit 1933–1939* (Wallstein Verlag: 2011) (in German; available online), authors' own calculations.

The austerity measures came into effect against a backdrop of declining GDP and rising unemployment.

(orange line). Internationally, the situation was similarly bleak. The New York Stock Exchange collapsed on October 29, 1929, marking the beginning of the deepest global economic crisis to date, the Great Depression, which would last until the mid-1930s. In addition, the 1919 Treaty of Versailles, which laid out the reparations that Germany had to pay to the Allied Powers, repeatedly brought the Weimar Republic to the brink of insolvency. Reparations were assessed to be 132 billion gold marks in subsequent negotiations. Although the reparations were reduced several times over the years and suspended in some cases, they represented a financial burden for the state budget.

Brüning responded to the crisis with austerity measures. Lacking support in the *Reichstag*, he implemented his austerity measures in the form of five emergency decrees (dashed vertical lines). In doing so, he relied on Article 48 of the Weimar Republic's constitution, which allowed the president—Paul von Hindenburg at the time—to enact emergency measures without the *Reichstag*'s consent.

With an already tense political situation in the early 1930s, Brüning's unpopular policies further contributed to the radicalization of German society. Hitler and the NSDAP[4] lead an offensive campaign against the austerity measures, profiting greatly from the negative mood among the population.[5] In the May 1928 *Reichstag* election, the NSDAP received less than three percent of the votes. In contrast, in the September 1930 election, half a year into Brüning's term, the NSDAP received 18.3 percent.[6] In July 1932, only two months after Brüning's resignation, the NSDAP received over 37 percent of the vote, double that of the September 1930 election. After that, it took only six months until Hitler was appointed Reich Chancellor in January 1933.

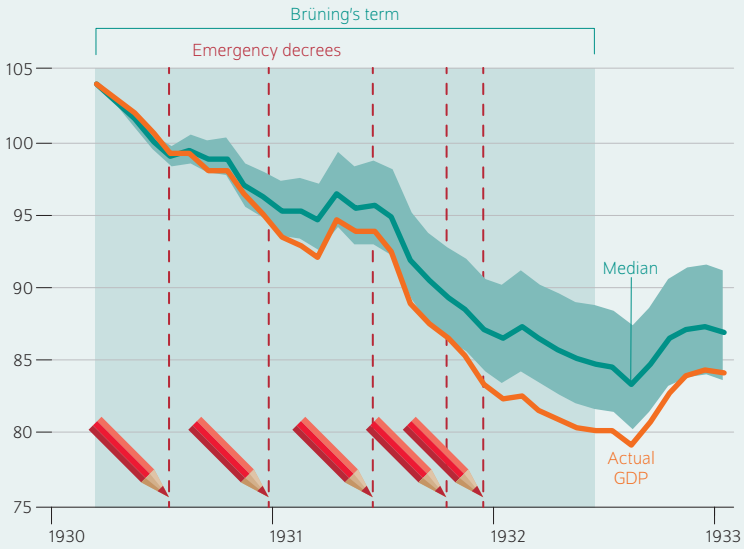
4 NSDAP stands for *Nationalsozialistische Deutsche Arbeiterpartei*, the National Socialist German Workers' Party—colloquially known as the Nazis.

5 Gregor Galofré-Vilà et al., "Austerity and the Rise of the Nazi Party," *The Journal of Economic History* 81, no. 1 (2021): 81–113 (available online).

6 While the emergency decree contributed markedly to this significant increase, it was not the sole factor. Other factors that were in play before Brüning's term began, such as rising unemployment, also contributed to the NSDAP's gains in the September 1930 election, cf. Galofré-Vilà et al., "Austerity and the Rise of the Nazi Party."

Figure 2

Counterfactual GDP per capita between March 1930 and January 1933
In Reichsmarks



Notes: The green line is the median of the counterfactual GDP without austerity measures. The dark green shaded area around the line represents the 68-percent credible interval. The orange line is the development of actual GDP. The vertical lines mark the dates the emergency decrees were announced during Brüning's term (light green shaded area).

Source: Authors' own calculations.

Brüning's austerity policies had short-term negative effects on GDP.

Table

Federal revenue and spending categories

Spending	Revenue
1S: Transfers to federal states	1R: Taxes, duties, levies
2S: Social expenditure	2R: Capital income
3S: Remuneration of civil servants and employees	3R: Extraordinary taxes
4S: Housing, assets	4R: Other revenue
5S: Military, police, transportation	
6S: Reich debt and coverage of public deficit	
7S: War burdens	
8S: Reparations	
9S: Other expenditure	

Source: Authors' own depiction.

Brüning's austerity measures caused a 4.5-percent slump in GDP

Ninety years after Brüning's resignation, the macroeconomic consequences of his austerity policies are still largely unclear. The previously available quarterly figures have provided imprecise results for the economically turbulent early 1930s. However, a new dataset that includes the Weimar Republic's monthly public revenue and spending as well as a new austerity shock series that was created using historical data makes an initial quantification of the effects of Brüning's austerity policy on GDP and unemployment possible.

For the period April 1927 to February 1935, the monthly federal budget is broken down into detailed revenue and spending categories.[7] The starting point is the 1935 *Konjunkturstatistisches Handbuch* by Ernst Wagemann and its aggregated time series on the *Reich*'s monthly revenue and spending in particular.[8] These statistics cover the ordinary and extraordinary budgets and are organized by fiscal year. However, because the aggregated budget figures contain reparations or other components heavily dependent on the economy, such as social transfer payments and compensation payments to federal states and municipalities, these cannot be used directly in the empirical analysis. Instead, a number of historical sources are used—in particular, different editions of the *Statistisches Jahrbuch für das Deutsche Reich* and numerous issues of *Wirtschaft und Statistik*—to decompose the aggregate budget figures into detailed revenue and spending categories (Table).

This new decomposition of the budget makes it possible to construct appropriate revenue and spending variables for the empirical analysis. Tax revenue consists of taxes, duties, and levies (1R) minus the amount of tax transfers to the federal states (1S), social spending (2S), and interest and debt repayments (included in 6S), capturing 43 percent of the total budget. Government spending is measured by the remuneration of civil servants and employees (3S), housing and asset spending (4S), military, police, and transportation spending (5A), and other spending (9S)—41 percent of the total budget.

A further key element of this empirical analysis is the narrative austerity shock series, which was created using historical sources. Primary and secondary sources uniformly characterize Brüning's budget cuts and tax increases as exogenous economic policy measures, driven either by his political aspirations to end German reparation payments early[9] or by his intention to appease Germany's debtors to ensure

7 Albrecht Ritschl shows that of the total public sector spending between 1930 and 1932, around 40 percent was accounted for by the federal government and about 60 percent by the federal states, municipalities, and Hanseatic cities. Cf. Tables A-12 in Albrecht Ritschl, *Deutschlands Krise und Konjunktur 1924–1934: Binnenkonjunktur, Auslandsverschuldung und Reparationsproblem zwischen Dawes-Plan und Transfersperre, Vol. 2* (Berlin und Boston: 2002) (in German).

8 The German economist and statistician Ernst Wagemann (1884–1956) is considered the founder of empirical business cycle research in Germany. In 1925, he founded the *Institut für Konjunkturforschung*, today the German Institute for Economic Research (DIW Berlin). From 1923 to 1933 he was head of the *Statistisches Reichsamt*. The *Konjunkturstatistisches Handbuch* was one of the most detailed collections of economic data of its time. It includes around 790 monthly time series on the population, employment, unemployment, goods production, investments, transportation, trade, wages and prices, and financial statistics, cf. Ernst Wagemann, *Konjunkturstatistisches Handbuch 1936* (1935), section XVIII (in German).

9 Carl-Ludwig Holtfrerich, "Alternativen zu Brünings Wirtschaftspolitik in der Weltwirtschaftskrise?" *Historische Zeitschrift*, no. 235 (1982): 605–632 (in German); Heinrich August Winkler, *Weimar 1918–1933: Die Geschichte der ersten deutschen Demokratie* (Munich: 2018) (in German).

Box 2

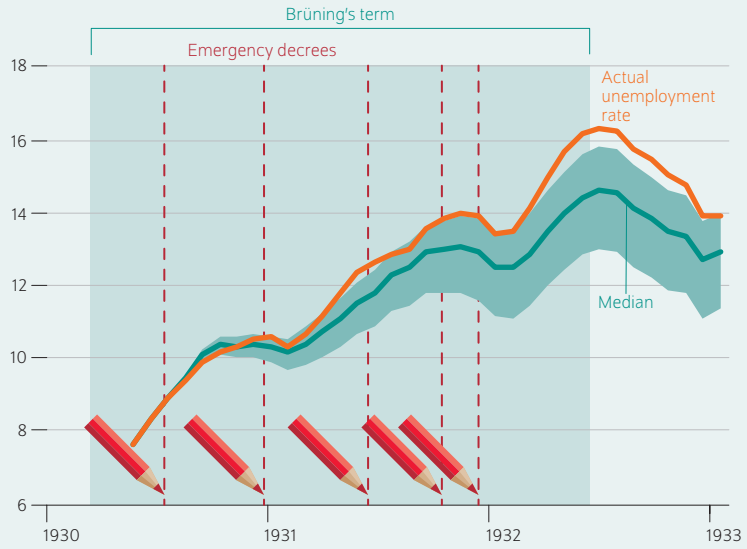
Methodology

One econometric challenge when evaluating economic policy measures is identifying causal effects. A causal effect is identified when a specific effect of economic variables can be clearly inferred from an economic policy measure. Without identification assumptions, it is unclear whether economic events determine policy action, policy action determines economic events, or both. Therefore, events exogenous to the economic situation are examined to gain insight on the direction of the economic policy effect. In the present analysis, a narrative (based on historical sources) strategy is used to construct an exogenous austerity shock series. With this shock series, the causal effects of Brüning's austerity policies can be analyzed in a vector autoregression model (VAR).

The Bayesian estimated VAR model includes six variables. In addition to the shock series and the government revenue and spending variable, it includes a price variable and the *Reichsbank* discount rate to account for monetary policy. The model is estimated alternately using GDP or the unemployment rate.

Figure 3

Counterfactual unemployment rate between March 1930 and January 1933
In percent



Notes: The green line is the median of the unemployment rate without austerity measures. The dark green shaded area around the line represents the 68-percent credible interval. The orange line is the development of actual unemploy-ment. The vertical lines mark the dates the emergency decrees were announced during Brüning's term (light green shaded area).

Source: Authors' own calculations.

Brüning's austerity policies increased unemployment significantly.

access to foreign credit.[10] The five emergency decrees issued by Brüning between July 1930 and December 1931 provide data for a quasi-experiment to estimate the effects of the exogenous austerity intervention. In particular, the knowledge about the direction and timing of these shocks is used to construct a qualitative austerity shock variable.[11] Together with the monthly time series on the *Reich* budget and other macroeconomic time series, this austerity shock series is used to quantify the effect of Brüning's austerity policy in a time series model (Box 2).

The model estimation makes it possible to calculate counterfactual scenarios. Using this approach, it can be estimated how economic output and unemployment would have developed without Brüning's austerity policies. From the first emergency decree in summer 1930 until the end of Brüning's term in May 1932, counterfactual GDP (green line) exceeds actual GDP (orange line) (Figure 2). Thus, the emergency decrees negatively affected economic activity throughout the majority of Brüning's term. The difference between the estimated and observed GDP becomes statistically significant beginning in August 1931.

In total, the losses from the statistically significant estimated months amount to 4.46 percent of the GDP of the reference year (1932). When comparing the losses to the reparation payments made by Germany in 1930—the year in which Germany made the most reparations payments since the end of World War I—the economic losses due to Brüning's emergency decrees amount to 239 percent.[12]

The situation on the labor market was similarly bleak. From October 1930 onward, the estimated (green line) unemployment rate runs below the actual realized unemployment rate (orange line) and remains there until the end of Brüning's chancellorship (Figure 3).

10 Knut Borchardt, "Zwangslagen und Handlungsspielräume in der großen Wirtschaftskrise der frühen dreißiger Jahre: zur Revision des überlieferten Geschichtsbildes," *Jahrbuch der Bayerischen Akademie der Wissenschaften* (1979): 85–132 (in German); Harold James, *The German Slump: Politics and Economics 1924–1936* (Oxford: 1986); Ritschl, *Deutschlands Krise und Konjunktur 1924–1934*.

11 Constructing qualitative shock variables is not new to empirical macroeconomic literature and is in the tradition of Christina D. Romer and David H. Romer, "Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz," *NBER Macroeconomics Annual 1989, vol. 4* (1989): 121–184 (available online); Valery A. Ramey and Matthew Shapiro, "Costly capital reallocation and the effects of government spending," *Carnegie-Rochester Conference Series on Public Policy* 48 (1998): 145–194 (available online); Kartazyna Budnik and Gerhard Rünstler, "Identifying SVARs from sparse narrative instruments: dynamic effects of U.S. macroprudential policies." Working Paper Series 2353, European central Bank, 2020 (available online); and Lukas Boer and Helmut Lütkepohl, "Qualitative versus quantitative external information for proxy vector autoregressive analysis," *Journal of Economic Dynamics and Control*, no. 127 (2021) are more recent works that use the same approach. In the analysis presented here, the shock variable is set to minus one on the announcement dates of Brüning's emergency decrees (July 1930, December 1930, June 1931, October 1931, and December 1931) and to zero on the other dates.

12 For these calculations, the statistically significant estimated GDP losses (in Reichsmark, real and per capita) are compared to the reparations paid by Germany in 1930 (in Reichsmark, real and per capita) and multiplied by 100.

Unemployment would have been much lower in the final years of the Weimar Republic without Brüning's austerity measures. Moreover, the gap increases with time; thus, Brüning's fiscal policy increasingly drove up unemployment. The difference becomes statistically significant one month after the final emergency decree is announced. The impact of the emergency decrees resulted in an additional 3.31 million unemployed during the significant period between January and June 1932 alone, nine percent of the average monthly labor force in 1932.

Conclusion: Brüning's austerity policy worsened the recession

The analysis shows that Brüning's fiscal austerity course did not have a stabilizing effect. Instead, the austerity measures led to an additional 4.5-percent slump in GDP and an additional 3.31 million unemployed while Germany was already struggling due to a global economic crisis and a banking crisis.

This considerable macroeconomic damage was not without impact. Years of extreme economic hardship led the population to turn away from established political parties and toward political movements promising economic alternatives. It is tragic that the NSDAP was the party to profit most from this. In hindsight, Brüning's austerity policy accelerated their rise to power.

The pros and cons of fiscal austerity have been hotly debated in the 21st century as well, in particular during times of government debt: during the European debt crisis when the European troika (IMF, ECB and EC) imposed harsh austerity measures on Greece, for example, or during the coronavirus pandemic, as there are currently calls for a return to the Maastricht criteria. The austerity measures between 2010 and 2014 have been proven to have worsened the situation of Southern European countries during the debt crisis. As this was also the case in the Brüning era 90 years ago, it should be carefully considered how effective an austerity policy would be in reducing the debt levels in the European countries affected by the pandemic and high inflation.

Of course, the situation in 2022 is not the same as it was in the 1930s. However, nationalist voices are becoming increasingly louder in Europe and Germany, which could be a cause for concern. Here, too, studies show that an increasing lack of prospects and economic uncertainty can accelerate the turn away from traditional political parties.[13]

13 Christian Franz, Marcel Fratzscher, and Alexander S. Kritikos, "German right-wing party AfD finds more support in rural areas with aging populations," *DIW Weekly Report*, no. 7/8 (available online).

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