FOMC Communication Spillovers: Is There a "Call-Out" Effect?

By Karlye Dilts Stedman and Chaitri Gulati

The Federal Open Market Committee (FOMC) has a clear domestic mandate: achieving both stable prices and maximum sustainable employment. However, the FOMC's actions appear to lead to substantial spillover effects for foreign economies. Announcements from the FOMC can spill over to asset prices in foreign markets by altering market participants' expectations for global growth or the future decisions of their own central banks. To date, research has treated news in U.S. monetary policy announcements as a global shock that produces uniform spillovers. Whether these spillovers sometimes reflect market-specific information has remained an open question.

In an example of a potential market-specific spillover, on the day the November 2010 FOMC meeting minutes—which extensively reference countries in the euro area—were released, the euro area MSCI total return index fell 3.6 percent, and the euro depreciated against the dollar by 2.0 percent. This movement is significant considering that the 2007–21 average daily change of the MSCI and exchange rate in either direction is 1.0 percent and 0.4 percent, respectively. The above-average movements in foreign asset markets following the release of FOMC minutes in this example and others suggest that foreign asset prices may react to FOMC communication that specifically references foreign

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countries, currencies, and central banks—a potential "call-out effect" of U.S. monetary policy communication.

In this article, we present several observations, or stylized facts, that shed more systematic light on the market-specific content of international spillovers. Although we do find some evidence for the importance of country-specific mentions, these effects are modest and may reflect increased sensitivity to monetary policy shocks rather than the release of country-specific information. In other words, a "call-out effect," per se, of U.S. monetary policy communication may be minimal.

Section I motivates our analysis and provides some background on spillovers from central bank communication. Section II describes our data and methods. Section III outlines stylized facts. Section IV discusses caveats to the interpretation of the results and further analysis, suggesting future avenues for research in this area.

I. Background on Spillovers from U.S. Monetary Policy

A large body of research has documented how global markets respond to the FOMC's monetary policy announcements. Early work has emphasized the effects that changes to U.S. monetary policy have on trade balances, either through exchange rates and exchange rate management, or through the effects of U.S. demand on trading partner economies' goods and services (see, for example, Kim 2001 and Obstfeld and Rogoff 1995). More recent work has highlighted the implications of U.S. monetary policy for global financial conditions. In its most basic formulation, easing monetary policy lowers longer-term yields in the United States and, through portfolio balance effects among financially interconnected economies, leads to capital flows abroad that lower yields in foreign economies (Fratzscher and others 2018; Neely 2015). These easier financial conditions boost domestic spending and thus GDP in foreign countries.

U.S. monetary policy can also influence global financial flows through risk premiums and investor sentiment. Because the U.S. dollar serves as the world's reserve currency and the United States plays a singularly important role in the global financial system, the Federal Reserve's monetary policy influences the balance sheets of firms and individuals that lend funds abroad. By affecting these balance sheets, U.S. monetary policy alters not only the availability of foreign credit

broadly but also the risk-taking behavior of these firms and individuals, with implications for financial stability (see, for example, Bruno and Shin 2015, Borio and Zhu 2012, and Miranda-Agrippino and Rey 2020). In this framework, contractionary Federal Reserve policy leads to a deleveraging of global financial intermediaries, reduced international capital flows, declines in the provision of domestic credit around the world, and tighter foreign financial conditions.

In addition to "pure" monetary policy shocks, central bank communication also generates what is often referred to as the "central bank information effect" (see, for example, Romer and Romer 2000 and Nakamura and Steinsson 2018). Although central banks release information purposefully through forward guidance, policy actions also contain information regarding policymakers' level of confidence in economic fundamentals. In communicating its policy decision, which generates a monetary policy shock, the FOMC also communicates its assessment of the economic outlook to justify its decision, which generates a news shock—the central bank information effect. Although both types of information carry implications for the global economy, they have distinct outcomes. For example, an expansionary monetary policy decision conveys information regarding the path of policy, be it a decrease in the federal funds rate, an increase in asset purchases, forward guidance, or some combination thereof. We would expect this decision to raise asset prices and lower yields, loosening financial conditions and causing a depreciation of the domestic currency. The decision may also convey a previously unknown degree of pessimism in economic conditions on the part of the central bank that warrants a loosening of policy. In the face of this negative economic news, we would expect asset prices to fall, yields to rise, and financial conditions to tighten.

Whereas research studies on pure monetary policy shocks emanating from the FOMC's announcement of policy decisions are many and varied, research on the international spillovers of central bank information—specifically, the macroeconomic news content of the communications—is sparse. The few studies in this area tend to treat the information effect as a global phenomenon; that is, information released by the FOMC either reveals information about economic conditions that are global in scope, or the United States plays such an important role in the global economy that its domestic news has global effects.

Global growth news can refer to common conditions (including those emanating from the United States) that market participants expect to affect the home economy in a similar fashion. This type of news could induce foreign yields to co-move with yields in the United States by generating the expectation that the foreign central bank will move policy in the same direction as the Federal Reserve or directly ease credit conditions (as in a pure monetary policy shock). Alternatively, this type of news could induce asset price changes in the opposite direction, such as the central bank information shocks documented domestically. Empirical evidence suggests that expansionary Fed information shocks increase global investors' risk appetite, easing financial conditions on net (Pinchetti and Szczepaniak 2021; Franz 2020). Thus, we see evidence to suggest that FOMC communication could generate spillovers to foreign economies both through the channels of monetary policy and by revealing information about global economic conditions.

We go a step further and consider whether FOMC communication might generate uneven spillovers across countries rather than uniform spillovers, as prior research has assumed. Can the Federal Reserve generate news spillovers specific to the markets they discuss? Are spillovers amplified by the presence of specific information? Market-specific news might, for example, highlight the conditions of a foreign country or include information on policy coordination with the Federal Reserve, such as swap lines.[1] These specific mentions have the potential to amplify spillovers by generating a "call-out" effect—heightening awareness of conditions abroad or increasing their perceived importance by virtue of the FOMC's attention.

II. Measuring Spillovers Using FOMC Meeting Minutes

To shed some light on the potential for a call-out effect from market-specific news, we examine the minutes of 119 FOMC meetings from 2007 to 2021, which are available on the Federal Reserve Board's website and released three weeks after the date of the policy decision.[2] We focus on the minutes' releases rather than the FOMC decision announcements because the minutes contain more detailed information on the context in which the policy decision was reached; the FOMC announcement transcripts rarely address international developments in any detail.

To spot market-specific news, we use a predetermined list of words to find both implicit and explicit mentions of six countries with strong financial and trade ties to the United States: the UK, Switzerland, Japan, Canada, Mexico, and the euro area.[3] To find references to economic conditions in these countries, we screen the text for the country's name, currency, central bank, and references to swap lines and sovereign bonds. Table 1 summarizes the number of meeting minutes (out of 119) that contain references to each of our sample countries as well as the total number of mentions for each country in our sample from 2007 to 2021. Unique in our sample, the euro area is mentioned in every set of meeting minutes—either as a region or in reference to one of its key member states—constituting a total of 817 references. Switzerland is mentioned the fewest times, with a total of 39 mention days aggregating to 74 references.

To measure spillovers, we gather daily data for several key asset prices for each of these six countries. To assess the spillover effects on equity markets, we use the country-specific MSCI total return indices from Refinitiv (formerly Thomson Reuters Datastream). To assess the spillovers to sovereign bond markets and currency markets, we use the corresponding zero-coupon bond yields and nominal exchange rates vis-à-vis the U.S. dollar from Bloomberg, respectively, for each country. Using daily data helps us isolate the foreign effects of the Federal Reserve's policy actions. Up to the day of a central bank announcement, financial markets will have already included in their price what investors expect the central bank to do, including any attendant international effects. If markets that are closely linked to monetary policy decisions change immediately after a monetary policy announcement (either upward or downward), we can credibly assume that asset prices changed because of monetary policy itself. Extending this assumption to some international contexts requires an adjustment, however. While Canada and Mexico have the same trading hours as the United States, trading closes in European and Asian countries before the time of the minutes' release. Thus, for those markets, we examine the reaction of asset prices to the minutes the day after they are released.[4]

Table 1
Country-Specific Mentions in FOMC Minutes, 2007–21

Countries	Minutes referencing the country	Total references
Switzerland	39	74
Mexico	85	162
Canada	102	225
Japan	103	283
UK	107	212
Euro area	119	817

Sources: Board of Governors of the Federal Reserve System and authors' calculations.

III. Stylized Facts: Evaluating Country-Specific Spillovers

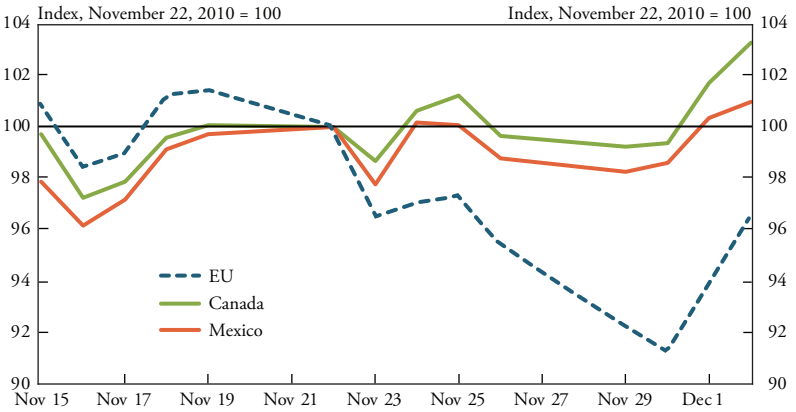
To look for evidence of monetary policy announcements affecting foreign asset prices, we analyze a subset of dates where a few countries are mentioned at a time and collect the largest absolute value changes in asset prices on those dates. Our opening example from November 23, 2010, for instance, contains meaningful references only to euro area countries.[5] At the time, deteriorating financial conditions in Europe, particularly in peripheral countries, loomed large. For example, "the German economy continued to perform strongly, while recent data showed weakness in the peripheral euro-area countries… Spreads relative to German bunds on the 10-year sovereign bonds of most peripheral euro-area countries either declined or were little changed over the period, but Irish sovereign spreads moved higher on concerns over the fiscal burdens associated with losses in the Irish banking sector." The text of the minutes also intones that the ECB's contemporary policy response did not line up with financial market expectations.[6] For example, "Benchmark 10-year sovereign yields generally declined in the major advanced foreign economies, but the overnight rate in the euro area increased as the European Central Bank continued to allow the amount of liquidity provided to the banking system to decline."

Chart 1 suggests that the release of the minutes coincided with a discernable change in European asset prices. The chart shows the path of the MSCI total return index and the exchange rate (in local currency to U.S. dollars) in the euro area (dotted line) and in two countries with no reference in the minutes, Canada and Mexico. In each case, the series are normalized into an index to equal 100 on the day before the

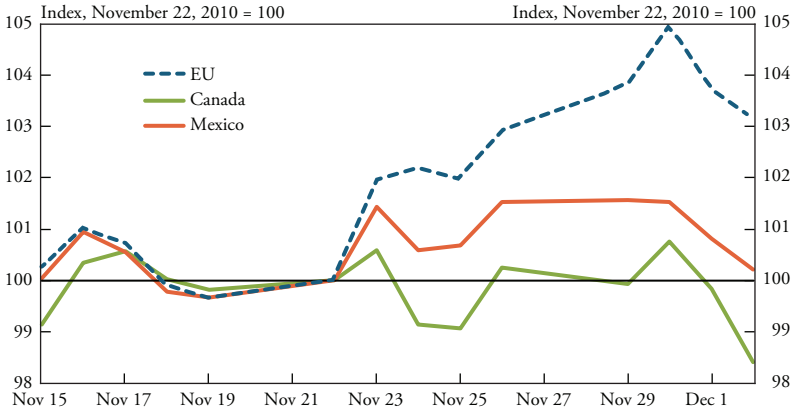
Chart 1

Release of November 23, 2010, FOMC Meeting Minutes Coincides with Change in European Asset Prices

Panel A: MSCI Total Return Index Falls Furthest for the EU after Mention



Panel B: Euro Weakens Noticeably against the U.S. Dollar after Mention



Notes: Dashed line indicates country-specific mention. Solid lines indicate no mention.
Sources: Refinitiv, Bloomberg, and authors' calculations.

minutes were released (November 22, 2010) and are shown from 10 business days before the release until 10 days after. From the close of trading on November 22 until the close of trading on November 23, the euro area MSCI total return index fell 3.6 percent, and the euro depreciated against the dollar by 2.0 percent. For context, the average change of the MSCI and exchange rate in either direction over the sample is 1.0 percent and 0.4 percent, respectively, with standard deviations of 1.10 percent and 0.39 percent. Thus, the changes observed on this date were 2.4 and 4.1 standard deviations above the mean, respectively. In addition to the one-day change, the MSCI continues to trend down and the currency continues to depreciate in the days following the release. In contrast, the MSCI and exchange rates of Mexico and Canada show a comparatively flat trend, moving somewhat on the date of the minutes release, but returning to their pre-release values thereafter.

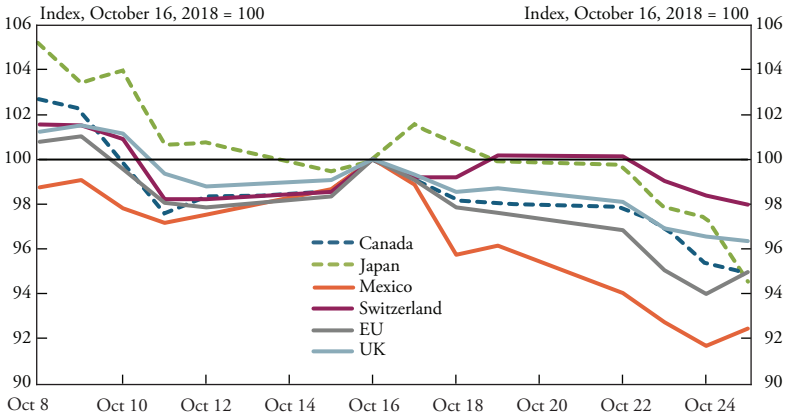
Although each of the minutes contains at least one reference to one of our sample countries, asset prices also occasionally react to minutes in which their corresponding markets receive no mention, consistent with the release of global news. For example, despite the overall positive tone of the minutes on October 17, 2018, any reference to foreign economies contained in the minutes is decidedly downbeat. In line with such pessimism over the global outlook, Chart 2 shows that MSCI total returns fell and currencies depreciated in nearly all the markets under consideration, regardless of whether they were referenced (shown in dotted and solid lines, respectively). Examples such as these illustrate that global news, absent any particular country-specific aspect, generate uniform spillovers whereby foreign asset markets react to global growth news alone.

To take a more systematic look at reactions to the minutes we compare them across time. We first classify dates as containing a country-specific reference in the minutes, making no reference in the minutes, or as having neither an FOMC meeting statement nor minutes released. Table 2 shows the average in absolute value of the change in yields, the growth of the MSCI total return index, and the growth of the exchange rate (in local currency to U.S. dollars) on each of these date types. The fourth column of the table shows the ratio of minutes containing a mention to minutes that make no mention, on average; positive values indicate that days with a mention see more movement

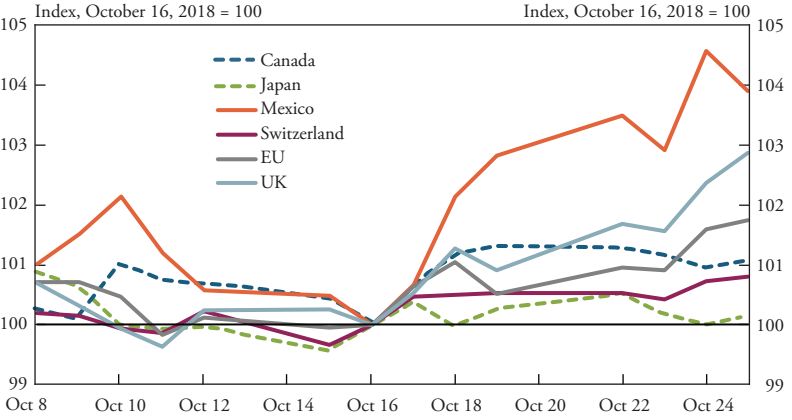
Chart 2

Asset Prices React to Release of Global News

Panel A: MSCI Total Return Indices Fell across All Countries Driven by Pessimistic Global Growth Outlook



Panel B: Currencies Largely Depreciated against the U.S. Dollar Irrespective of Mentions



Notes: Dashed lines indicate country-specific mention. Solid lines indicate no mention.
Sources: Refinitiv, Bloomberg, and authors' calculations.

Table 2
Asset Prices Broadly Move More on Mention Days

Country	Mention (1)	No mention (2)	Non-FOMC (3)	Mention / no mention (percent) (4)
Exchange rate growth (local currency / USD)				
Canada	0.423 (0.369)	0.316 (0.209)	0.421 (0.402)	33.9
Mexico	0.642 (0.65)	0.611 (0.525)	0.565 (0.579)	5.1
EU	0.417 (0.337)	0.369 (0.064)	0.416 (0.389)	13.0
UK	0.413 (0.369)	0.480 (0.382)	0.426 (0.418)	–14.0
Switzerland	0.526 (0.435)	0.405 (0.385)	0.432 (0.512)	29.9
Japan	0.587 (0.494)	0.311 (0.251)	0.421 (0.437)	88.7
MSCI total return growth				
Canada	0.944 (0.982)	0.821 (0.624)	0.915 (1.112)	15.0
Mexico	1.142 (1.135)	0.958 (0.736)	1.135 (1.2)	19.2
EU	1.114 (1.036)	0.738 (0.651)	1.029 (1.147)	50.9
UK	0.944 (1.04)	1.303 (0.613)	0.939 (1.087)	–27.6
Switzerland	0.905 (0.9)	0.854 (0.801)	0.791 (0.845)	6.0
Japan	1.058 (1.013)	0.692 (0.624)	0.916 (0.922)	52.9
Yields: average change of one-, five-, and 10-year bonds				
Canada	0.025 (0.017)	0.030 (0.02)	0.028 (0.025)	–16.7
Mexico	0.063 (0.144)	0.086 (0.219)	0.100 (0.217)	–26.7
EU	0.028 (0.024)	0.017 (0.021)	0.024 (0.023)	64.7
UK	0.034 (0.028)	0.032 (0.019)	0.032 (0.028)	6.3
Switzerland	0.022 (0.032)	0.018 (0.012)	0.018 (0.016)	22.2
Japan	0.012 (0.012)	0.005 (0.003)	0.010 (0.01)	14.0

Sources: Board of Governors of the Federal Reserve System, Refinitiv, Bloomberg, and authors' calculations.

than those without, while negative values indicate the reverse. We use the absolute value of changes as we do not account for the tone of the minutes—the minutes can contain "good" news or "bad" news—which allows us to comment on the existence of an effect without taking a stand on its direction.

Ultimately, we find limited systematic evidence for the importance of specific mentions in the minutes. Although most countries in the sample (those with positive values in column 4) see their included asset prices move more on mention days than on the dates of minutes releases in which they are not referenced, these differences are modest. For example, the top row of numbers in Table 2 shows the average change in the Canadian exchange rate on the dates of mentions (0.423), those of minutes with no mention of Canadian developments (0.316), and dates with no FOMC activity (0.421). The fourth column shows that the average exchange rate growth on mention days is 33.9 percent larger than that observed on non-mention days (0.423 / 0.316 – 1 = 0.338). Thus, the effect of a release on the Canadian exchange rate is 33.9 percent larger when Canada is mentioned in the minutes in some form, whereas the difference in the average exchange rate of Canada on mention days versus days with no FOMC activity is only 0.48 percent.

In each category, Japanese asset prices move the most in response to country-specific references relative to dates with no reference (111 percent more on average), while Mexican asset prices react the least (6 percent less). Comparing mention dates to those with no FOMC activity yields similar counts, though the difference in the average between those dates is less dramatic still. Among asset classes, bond yields move the most on mention days relative to other minutes releases (32 percent more), while MSCI total returns move the least (19 percent more).

IV. Caveats and Further Analysis

We consult the minutes for our analysis because they present more context than the FOMC announcements, but this methodological decision requires some caveats. The principal drawback of examining the minutes for market-specific mentions is that they comprise, in large part, background information compiled by the Federal Reserve's staff economists reviewing economic conditions at the time of the meeting. Only the latter section of the minutes discusses the deliberation of the

committee. This second section of the minutes is thus more likely to contain a monetary policy shock because it emanates from policymakers. Because we do not distinguish between the two elements of the minutes in our analysis, the mentions we identify are not the same across the text in terms of informational content. Moreover, the minutes are released with a substantial lag, which lowers the likelihood that mentions contain current macroeconomic news. Mentions also arise when economic conditions are less certain. The minutes may only have an effect when the reference pertains to an ongoing situation. For example, references to countries with ongoing exposure to the European debt crisis may experience an "aftershock" when they are mentioned in the minutes.

To check the robustness of our findings, we repeat the analysis described in Section III using transcripts of the Chair of the Federal Reserve Board's post-FOMC press conferences from 2011 onward.[7] Although these dates contain the monetary policy shock of the FOMC announcement, the shock could have differential effects for "called-out" countries. Even using this sample of announcement-day mentions by the Chair, however, we find only small differences in asset prices on days with a country-specific mentions relative to those without. The patterns observed, as with the minutes, may instead reflect susceptibility to monetary policy spillovers: countries whose asset markets are more sensitive to U.S. monetary policy shocks by virtue of close financial ties are more likely to be mentioned. Thus, we might not be observing a causal market-specific effect for those countries. A more rigorous statistical treatment is needed to separate these effects.

Controlling for contemporaneous real and financial news presents an easy improvement to the analysis. However, in unreported results, we find that including control variables related to contemporaneous announcements does not much alter the picture. It appears that identifying the news content pertaining to specific non-U.S. markets requires a still more sophisticated approach. Identifying a domestic central bank information effect is straightforward—when monetary policy loosens (tightens), market participants may infer that the domestic growth outlook is more vulnerable (robust). The same logic translates to global news generated by the FOMC. However, the potential for market-specific information likely relies on context in that the mention may often

differ in tone from the overall communication. Thus, the exact context and tone of the reference would determine whether the sentiment it generates amplifies or ameliorates the overall spillover from monetary policy or information shocks. We suggest that any future exploration of a call-out effect would benefit from considering this angle.

Conclusion

International spillovers of U.S. monetary policy decisions have broad implications for foreign economies and market participants. During periods of high volatility in international asset markets, mentions of foreign countries in FOMC minutes may explain some of the movements of foreign asset prices. In sovereign debt markets, spillovers provide informational content on the term structure of interest rate yields. Large banks with portfolio exposure to global financial markets and investors holding foreign assets benefit from information about the co-movement of asset prices around the world. For U.S. policymakers, assessing potential "spillback" effects to the U.S. economy as global economies become more interconnected could be of great importance.

U.S. monetary policy decisions produce spillovers in foreign asset markets as FOMC communications alter market participants' perceptions of global growth and their expectations for central bank responses abroad. Since the onset of the 2007–09 global financial crisis, monetary policy spillovers have increased in response to policy actions by the Federal Reserve. We evaluate whether international spillovers vary when the triggering information is market-specific by assessing the effect on foreign asset prices on mention versus non-mention days. Although we find limited evidence for a call-out effect of U.S. monetary policy communication, a more rigorous treatment is needed to cleanly identify shocks of this type.

Endnotes

[1]A currency swap line is an arrangement between central banks to exchange currencies with the intended goal to meet foreign currency liquidity needs for domestic institutions—especially beneficial in times of market stress.

[2]We exclude minutes released on October 7, 2008, as both statements and minutes were released on this day, making it difficult to distinguish the source driving any observed effects.

[3]Within the euro area, we only search for the following member states: Germany, France, Spain, Ireland, Italy, Portugal, and Greece. These euro area member countries are the most referenced in the minutes, and their sovereign yields are the most traded.

[4]This adjustment does not apply to currencies as foreign exchange trades throughout the day.

[5]The minutes contain only a glancing mention to the Nikkei (Tokyo Stock Exchange) and FTSE (London Stock Exchange) equity indices: "Major equity indexes in the euro area and in the United Kingdom increased moderately, whereas the Nikkei index declined."

[6]The ECB had not yet committed to doing "whatever it takes" to prevent the dissolution of the euro. Mario Draghi, then-president of the ECB, gave a speech on July 26, 2012, stating that "the ECB is ready to do whatever it takes to preserve the euro" (Draghi 2012). The speech was perceived as an implicit commitment from the ECB to provide unlimited support to the euro area at a time of severe deterioration in economic and financial conditions.

[7]Post-meeting press conferences only became a regular occurrence beginning in April 2011.

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