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Trade and the Current Crisis

Three new studies explore the sensitivity of trade to changes in income and access to finance

Trade is one of the more visible victims of the current crisis. In the first quarter of 2009, the value of world merchandise trade fell by 30 percent relative to the same period in the preceding year. The volume of trade is estimated to have fallen by over 15 percent during this period with considerable variation across countries and sectors. New World Bank research demonstrates the growing sensitivity of trade to changes in income, the adverse effects of the financial crisis, and the relative resilience of services trade.

The responsiveness of trade to income has risen over time, and tends to be higher during global downturns. Caroline Freund shows that the elasticity of trade to income rose from less than 2 in the 1970s to over 3.5 in recent years. In addition, she finds that during the global recessions that occurred in 1975, 1982, 1991 and 2001, while income growth declined on average by 1.5 percentage points relative to the previous year, real trade declined by nearly five times as much.

The study suggests a number of factors that might be driving these results. Firms may sharply draw down accumulated inventories when the forecast worsens in an unexpected and dramatic way. Also, goods decline more than services during downturns and services make up the bulk of GDP, while goods make up the bulk of trade. Moreover, the share of services in GDP has increased over time, magnifying this difference.

Financial crises can exacerbate downturns in trade flows through adverse supply-side effects on exporters. Leonardo Iacovone and Veronika Zavacka explore the impact of banking crises on manufacturing in developed and developing countries during 1980–2000. They find that exports of sectors more dependent on external finance were hit harder during a financial crisis than were other sectors, with a 4-percentage-point reduction in export growth vis-à-vis that of sectors less dependent on external finance.

However, this result held only for sectors that relied more heavily on banking finance than on inter-firm finance. Also, sectors characterized by a higher share of tangible assets appeared to be more resilient in the face of a banking crisis because of their ability to raise external resources through higher collateral. Importantly, the study found that the impact of such "supply-side" shocks driven by credit shortages operates independently of negative demand shocks. Moreover, the effect of the latter was over and above that of a banking shock, in particular for sectors exporting durable goods.

Services trade has weathered the crisis much better than goods trade. Ingo Borchert and Aaditya Mattoo examine flows in services trade and show that although demand for services has plummeted, it has been less elastic and thus less cyclical than

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Back to Global Imbalances?

Augusto de la Torre, Luis Servén and Sergio Schmukler

The crisis has caused the debate on "global imbalances" to unfold in an unexpected way. Previously, many thought that current account imbalances would be eliminated through a drop in demand for US assets, implying a sharp devaluation of the US dollar and higher US interest rates. Instead, the crisis brought an appreciation of the dollar and record high US government bond prices. Will the recovery from the crisis entail a return to the old order?

Large imbalances developed over the last ten years, as the US financed its mounting current account deficits by borrowing abroad. (See figure 1.) This was sustained largely by developing country investments in US government securities—reflecting booming capital inflows, surging commodity prices and growing export volumes. Underlying this phenomenon were high savings rates in Asia and emerging market efforts to self-insure against crises as well as policies to forestall currency appreciation and encourage export-based growth. The resulting equilibrium looked fragile to many since it hinged on an unlimited willingness to buy US assets. To others, it looked more durable, as it enabled high-saving but financially underdeveloped countries to access advanced financial markets. But most expected an eventual unwinding of global imbalances, implying a shift away from US assets.

Unexpectedly, the crisis strengthened the position of the US dollar. As the crisis went global, the expected shift out of US assets did not materialize. Instead, the increase in risk aversion encouraged a massive shift in global portfolios to US T-bills. The US dollar became the reserve currency of last resort and the US government became both the borrower and creditor of last resort.

To be sure, the resilient attractiveness of US government securities during the crisis was accompanied by some mitigation of current account imbalances. The collapse in gross capital flows and the sharp decline in commodity prices reduced large trade surpluses in emerging economies. The US current account deficit shrank from 6.6 percent of GDP in Q4 2005 to 2.9 percent of GDP in Q1 2009—a much smaller deficit that was in part financed by US residents repatriating their capital. (See figure 2.)

Global imbalances may not fully disappear, however, at least in the short run. The crisis highlighted the effectiveness of self-insurance and this may prompt countries to increase their international reserves going forward. As international trade resumes and commodity prices rise above their recent lows, emerging economies may return to large trade surpluses and foreign asset accumulation. These funds may be channeled again to the US, provided that US government actions succeed in keeping inflation and depreciation in check. As the US economy recovers, the increase in private consumption, combined with the large fiscal expansion, may halt the decline in the US current account deficit. The resilience of US government bonds during the crisis, and the Fed's undisputed record as a world leader in managing the crisis, might attract investment into the US that would have otherwise gone elsewhere.

However, other forces could push in the opposite direction. As risk aversion diminishes, investors will pursue higher yields outside the US and international capital flows will resume. The incipient availability of country insurance mechanisms (such as the IMF's contingent credit facilities) may reduce the appeal of foreign asset hoarding for self-insurance purposes in emerging markets. Stricter financial regulation may undermine the franchise value of US financial institutions, aggravating the adverse wealth effect on aggregate demand. Enhanced safety nets and other expansionary fiscal actions in Asia might decrease external surpluses there. International investors, especially surplus countries, may shift toward currencies other than the dollar. Difficulties in unwinding the US monetary and fiscal stimulus could complicate the debt situation for the US government. These factors would

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Figure 1. US Current Account Balance and the Real Exchange Rate

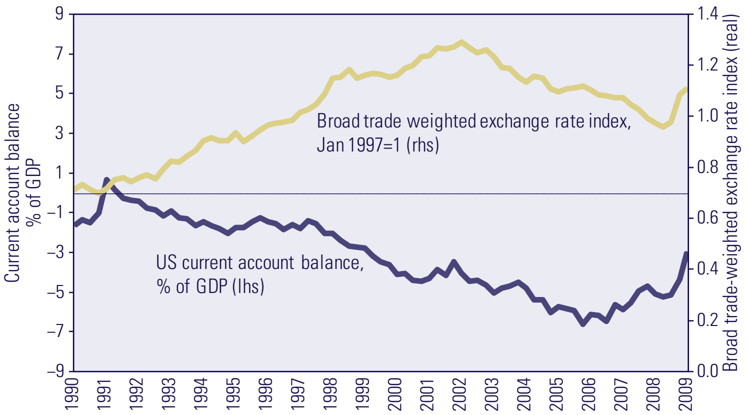
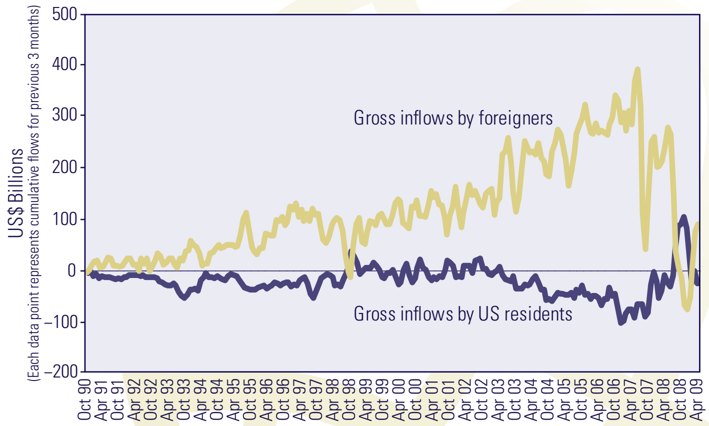


Figure 2. US Gross Capital (Long-Term Security) Flows



Impact Assessments in Finance and Private Sector Development

The myth that rigorous evaluations of finance and private sector projects are not feasible is dispelled by new research

Each year, the World Bank and national governments implement policies and projects designed to promote private sector and financial development. Yet there is almost no convincing evidence about which policies work, which don't, why, and how they can be improved.

Rigorous impact evaluations, which compare the outcomes of a program or policy against an explicit counterfactual of what would have happened without the program or policy, are one of the most important tools that can be used along with appropriate economic theory for understanding "what works." Despite this, impact evaluations have been extremely rare. This is now particularly apparent in the area of finance and private sector development, where the recent financial crisis has prompted renewed attention to understanding what works in terms of improving access to finance among consumers and firms, and promoting growth in the private sector.

• *Why are impact assessments so rare*? There is a perception that most development policies and projects in the financial and private sectors do not lend themselves to formal evaluations as easily as policies and projects in other areas do. For example, changes in laws or regulations may occur at an economy-wide level, or a large loan may only be given to one or two banks or firms.

Both bankers and government officials tend to measure success of projects by the number of loans given out, the number of businesses trained, or the number of business procedures reduced. The incentives necessary to undertake the harder task of measuring whether such projects impact firm productivity or lower poverty levels have been insufficient or missing.

• *When are evaluations possible, and are they worth it*? A handful of recent impact studies together with a new paper by David McKenzie seek to dispel the myth that rigorous evaluations of finance and private sector projects are not possible.

In many cases randomized experiments are possible, which offers many opportunities for evaluation as such experiments ensure that the only reason why some firms, consumers, or other units are subject to a policy or program while others are not is pure chance. This facilitates communication of results to policymakers. Recent examples include randomized provision of grants to small business owners, crop insurance to poor farmers, business training to entrepreneurs and credit to marginal borrowers. These experiments have generated many important results, including several that challenge the central precepts of microfinance.

Even when randomization is not possible, modern evaluation methods will often still allow for formal evaluation

Even when randomization is not possible (or is theoretically possible but is not undertaken), modern evaluation methods will often still allow for formal evaluation. Regulations may be implemented in some regions and not others, or may be applied only to firms of a certain industry or size. Generally available programs or policies may have low uptake that can be raised through targeted interventions. Exploiting these ideas, recent evaluations have examined the success of business registration reform in Mexico, bankruptcy reform in Colombia, and the introduction of a credit bureau in Guatemala.

• *What are the lessons for future impact evaluations*? Evaluation is feasible and useful for a wide range of projects and policies. Senior government officials and World Bank staff need to make it a priority in project development, so that evaluation not only assesses whether a project worked, but also helps ensure that it can work even better in the future.

Most existing evaluations have been limited to consumers, microenterprises and poor borrowers, and there is a dire need for evaluation of policies directed at banks and small and medium enterprises.

Evaluation designs need to take into account the low uptake of many finance and private sector policies. Not all households or firms will want or need a loan, attend training sessions, register formally or purchase insurance. Low uptake presents challenges for both identification and interpretation of program impacts, which can be overcome if the issue is recognized at the outset.

Incipient efforts in rigorous evaluation have yielded high payoffs in terms of knowledge generation and improvements in policy design. Given the World Bank's focus on promoting growth in the private sector in the aftermath of the financial crisis, it is now more important than ever to know what works and why. The Bank's new Research and Impact Note Series seeks to convince operational staff, NGOs and governments of both the feasibility and desirability of doing so.

David McKenzie. Forthcoming. "Impact Assessments in Finance and Private Sector Development." World Bank Research Observer. *Also available as Policy Research Working Paper* 4944. *World Bank, Washington,* DC.

Why Don't We See Poverty Convergence?

Does growth or the impact of growth on poverty depend on the initial poverty rate in a way that nullifies the advantage of backwardness?

Developing countries that start out with a high incidence of poverty typically do not enjoy a higher subsequent pace of poverty reduction, measured in proportionate terms. The overall incidence of poverty is falling in the developing world, but no faster than in the poorest countries. In short, we do not see "poverty convergence."

This is puzzling if we accept two widely-held "stylized facts" about economic development, namely that there is an "*advantage of backwardness*"—countries starting out with low mean incomes exhibit higher growth rates—and that there is an "*advantage of growth*," whereby a higher mean income tends to come with a lower incidence of absolute poverty. There is ample empirical support for both views, though with qualifications. The advantage of backwardness should mean that countries starting out with a high incidence of poverty and hence a lower mean (given the advantage of growth) should see a higher subsequent growth rate and hence a higher pace of poverty reduction. Indeed, the mean and the poverty rate will have the same speed of convergence in most widely-used log-linear models found in the literature.

In a new paper, Martin Ravallion suggests a solution to this puzzle. Intuitively, the hypothesis is that either the growth process in the mean, or the impact of growth on poverty, or both depend directly on the initial poverty rate in a way that nullifies the "advantage of backwardness."

To test this hypothesis, a dataset was constructed from household surveys for nearly 100 developing countries, each with two or more surveys over time. These data are used to estimate a model in which the rate of progress against poverty depends on the rate of growth in the mean and various parameters of the initial distribution—encompassing those identified in the literature—while the rate of growth depends in turn on the initial distribution as well as the initial mean.

The results indicate three distinct consequences of being a poor country for subsequent progress against poverty. The usual neoclassical convergence effect entails that countries with a lower initial mean, and so typically a higher poverty rate, grow faster and hence enjoy faster poverty reduction than otherwise similar countries. Against this, there is an adverse direct effect of poverty on growth, such that countries with a higher initial incidence of poverty tend to experience a lower rate of growth, controlling for the initial mean. Additionally, a high poverty rate makes it harder to achieve a given proportionate impact on poverty through growth in the mean. (By the same token, the poverty impact of economic contraction tends to be smaller in countries with a higher poverty rate.)

The two "poverty effects" work against the mean convergence effect, leaving little or no correlation between the incidence of poverty and the subsequent rate of progress against poverty. In terms of the pace of poverty reduction, the "advantage of backwardness" for countries starting with a low capital endowment (given diminishing returns to aggregate capital) is largely wiped out by the high level of poverty that tends to accompany a low initial mean.

This dynamic "disadvantage of poverty" appears to exist independently of other factors impeding growth and poverty reduction, such as human underdevelopment and policy distortions.

The evidence is mixed on other aspects of distribution. A larger middle class—by developing-country standards—makes growth more poverty-reducing. But this effect is largely attributable to the lower poverty rate associated with a larger middle class.

Controlling for the initial incidence of poverty, there is no sign that a higher overall level of initial inequality, as measured by the Gini index, inhibits the pace of poverty reduction via either the rate of growth or the growth elasticity.

Nonetheless, initial inequality is empirically important, through its bearing on the extent of poverty. While these new findings confirm that initial inequality matters to subsequent progress against poverty, they also reveal that it matters mainly via its bearing on the initial incidence of poverty. There is no sign in this paper's results that lower inequality among the non-poor, leaving the incidence of absolute poverty unchanged, brings any longer-term payoff in terms of growth and poverty reduction. In the minority of cases in which high inequality comes with low absolute poverty at a given mean, it does not imply worse longer-term prospects for growth and poverty reduction.

Future research should aim at improving understanding of this important handicap faced by poor countries in their efforts to become less poor.

Martin Ravallion. 2009. "Why don't we see poverty convergence?" Policy Research Working Paper 4974. World Bank, Washington, DC.

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tend to weaken the US dollar, increase US interest rates and lower current account imbalances over time.

In sum, to the extent that the US is expected to outperform other advanced economies in the medium term, it might continue receiving foreign capital and the previous pattern of global imbalances might be gradually restored in part. However, with strong forces operating in the opposite direction, the pre-crisis distribution of imbalances is not likely to be fully restored or sustained in the long run. Thus, it would be unwise to dismiss the possibility of an eventual major depreciation of the US dollar and a much higher diversification of global portfolios into non-US assets.

Sovereign Rents and Quality of Tax Policy and Administration

Windfall revenues from both foreign aid and natural resource exports can weaken governments' incentives to design and maintain efficient tax systems

A large body of literature shows that states benefiting from oil and other natural resource rents suffer from a "resource curse": they tend to be less democratic, more corrupt, and less interested in building state capacity for collecting taxes. Some studies have extended the resource curse phenomenon to official development assistance, arguing that both aid and resource revenues can be thought of as sovereign rents that generate dysfunctional rent-seeking behavior, and tend to receive less scrutiny from legislators and citizens than other revenues.

Arguably, these revenues can reduce a government's dependence on taxes from its own citizens, leading to long-run dependence on foreign aid and erosion of the quality of the tax system. Indeed, empirical work has found foreign aid to reduce tax revenues as a share of national income.

A recent study by Stephen Knack tests the hypothesized relationship between windfall revenues and the quality of tax systems as measured by the World Bank's Efficiency of Revenue Mobilization (ERM) rating for 135 developing countries. This measure scores countries on a scale of 1 to 6 taking into account a range of tax policy and administration characteristics. Knack finds that high levels of aid do tend to undermine the quality of tax systems. An increase in aid's share of gross national income by about 30 percentage points is associated with between a half-point and a one-point reduction in the ERM rating, depending on the econometric specification used. The effect of aid remains significant under all specifications and is not sensitive to outliers.

Revenues from natural resources are also associated with weaker tax systems: an increase in net fuel exports per capita of about $500 is associated with a half-point reduction in the ERM rating. However, this effect is neither as strong nor as statistically robust as that of aid, and it is sensitive to a small number of outliers. Moreover, the effect varies substantially depending on which measure of natural resource abundance is used.

On average, a 30-percentage-point increase in aid's share in GNI lowers a country's Efficiency of Revenue Mobilization rating by at least half a point

These findings are inconsistent with existing perspectives on the impact of aid revenues relative to that of natural resource revenues. It has been argued that while aid reduces the need for taxation and thus increases sovereign rents relative to better scrutinized revenues, it comes with various donor-imposed mechanisms of scrutiny that may offset its negative effects by substituting for reduced pressure from citizens.

The study warns that while this inconsistency is noteworthy, it may arise due to several factors. For example, it is possible that these data measure aid rents more accurately than they do resource rents. As a result, estimates of the impact of resource rents on quality of tax systems are less accurate than the corresponding estimates for aid, and natural resource revenues may still in fact be more damaging than the latter.

In addition, the difference in impacts may be an artifact of the sample. The dependent variable, ERM, is produced only for countries eligible for World Bank loans. Some high-income, resource-abundant countries with large resource rents, such as Saudi Arabia and Kuwait, are excluded from the sample. This might bias the results.

The study also cautions that policy responses to dependence on windfall revenues should distinguish between the impact of aid on the quality of tax systems and the net impact of all donor activity, which might include policy advice not linked in any way to aid flows. The latter cannot be estimated in the framework of this paper, as aid flows are easily measurable unlike the policy advice that might accompany them.

Given this, what can be done to mitigate the negative impact of development aid and natural resource revenues on the quality of governance in less-developed countries? The study presents several options.

- *Substantially reduce the share of windfall revenues going to central governments* by bypassing them, for example through distribution of oil revenues and cash grants directly to people, increased delivery of aid through NGOs and private firms or allocation of a larger share of aid to public goods such as agricultural or anti-malarial research.
- *Scale up donor efforts at technical assistance* through revenue reform projects to encourage the expansion of efficient domestic revenue-raising capacity in the long run, as well as through investments to improve tax administration, encourage compliance and broaden the tax base.
- *Support initiatives calling for disclosure of revenues and expenditures associated with natural resource rents and foreign aid.* Examples include the Extractive Industries Transparency Initiative at http://www.eitransparency.org, the Publish What You Pay coalition of civil society organizations at http://www.publishwhatyoupay.org and the International Budget Project at http://www.internationalbudget.org.

Stephen Knack. Forthcoming. "Sovereign Rents and Quality of Tax Policy and Administration." Journal of Comparative Economics. *Also published as Policy Research Working Paper* 4773. *World Bank, Washington,* DC.

Globalization and International Capital Raisings

A new study explores the characteristics and behavior of firms that raise capital abroad

Financial globalization over the last two decades has revolutionized international and corporate finance and a historically unprecedented magnitude of capital flows today across international borders. The amount raised by firms in foreign markets has grown almost fourfold since 1991, and approached one trillion US dollars in 2005.

In spite of these developments, fundamental questions about the internationalization of capital markets remain unanswered. Why do firms sell stocks and bonds in foreign markets? How do issues of securities in foreign markets affect firm performance? How do firms that raise capital abroad distribute their capital raising activity between domestic and international markets?

Gozzi, Levine and Schmukler explore these questions through an analysis of firm-level data from 116 countries collected during 1991–2005. Unlike most empirical and theoretical work on financial globalization that ignores debt markets, this study looks at both equity and debt issuances in domestic and international capital markets, and offers the following key insights on patterns of international capital raisings:

- *Internationalization is restricted to a small set of firms, and capital raising activity is highly concentrated within a small fraction of such firms.* Only 14.5 percent of the firms issued securities outside their home market during the survey period. The top 10 percent of the firms accounted for 69 percent (54 percent) of the total capital raised abroad by developed (developing) country firms.
- *Debt issues dwarf equity issues as a source of capital for firms.* In addition, bond markets tend to be more internationalized than equity markets. Debt issues in public markets accounted for 80 percent of the total amount raised through security issues during the survey period. About 35 percent of all capital raised through debt issues was acquired in a foreign market, compared to only 8 percent of all capital raised through equity issues.
- *"Internationalized" firms do expand and invest significantly more after raising debt or equity abroad relative to non-internationalized counterparts, but experience a long-term decrease in growth and profitability.* Thus firms became bigger but not necessarily "better" following internationalization. Moreover, these changes in firm performance are qualitatively similar to changes that followed equity and debt issuance at home, which suggests that issues in international markets are not intrinsically different from issues in the domestic market.
- *Firms not only continue but expand use of domestic debt and equity markets after they raise capital abroad, although they use foreign markets for relatively larger issuances.* A typical firm in the developed (developing) world that raised capital abroad accounted on average for 0.1 percent (0.3 percent) of the total capital raised in its domestic market each year prior to internationalization, and this share subsequently rose to 0.3 percent (0.5 percent). The authors argue that a possible reason why firms prefer to use both domestic and international markets and do not opt out of the former is that the two markets may provide different services: firms will access one or the other depending on their particular financing needs and market conditions.

Firms became bigger but not necessarily "better" following internationalization

These findings call into question the explanatory power of existing theories of internationalization and corporate finance. For instance, the argument that capital raisings in international markets are intrinsically different from capital raisings in domestic markets predicts improved firm performance after internationalization, potentially through adoption of better corporate governance systems. The present study finds, however, that issues in international markets do not appear to lead to performance outcomes that differ significantly from those following issuances at home.

Another view maintains that international markets offer unambiguously better services and/or less expensive capital than local markets. However, this idea is inconsistent with the finding that firms increase participation in domestic capital markets after raising capital abroad, and do not opt out of these markets. Similarly, the argument that price conditions in international securities markets drive a firm's decision to raise capital abroad does not fully explain why only a small fraction of firms in these data raises capital abroad.

These findings underscore the need for additional research in a number of areas. What factors drive the internationalization of debt markets? How does simultaneous participation in multiple debt and equity markets affect corporate financing choices? What are the implications of the finding that, following internationalization, "internationalized" firms account for a higher percentage of the total capital raised in domestic markets, and how might this affect the ability of smaller firms to obtain financing for growth?

Juan Carlos Gozzi, Ross Levine and Sérgio Schmukler. Forthcoming. "Patterns of International Capital Raisings." Journal of International Economics.

Climate Change Deepens Vulnerability to Poverty

Extreme climate events can drastically reduce agricultural productivity. What are the implications for poverty levels in developing countries?

Adverse climate events, like extreme heat, droughts and floods, can devastate agricultural systems in developing countries. Increased frequency and intensity of such climate extremes will adversely affect crop production, which could in turn reduce incomes of poor farmers and exert upward pressure on food prices. Both of these will tend to increase poverty levels. There is thus a strong need to quantify the impact of climate volatility on the poor, and to answer questions such as: Does the impact vary across socioeconomic strata? How will projected increases in climate volatility affect agricultural productivity?

A new paper by Ahmed, Diffenbaugh and Hertel explores these questions. The analysis focuses on the frequency and magnitude of extremely hot, dry, and wet years—e.g. years with heat waves, droughts, and excess rainfall—and their poverty implications in two time periods: the late twentieth century and the late twenty-first century. The climate in the future is based on one of the more pessimistic emissions scenarios considered by the International Panel on Climate Change, namely the A2 scenario characterized by low trade flows, slow capital stock turnover and slow technological change. Under this scenario, technology diffuses more slowly than in the other scenario. Families and international disparities in productivity, and hence income per capita, are largely maintained or increase in absolute terms.

The authors find that the frequency of occurrence of what is now the 30-year-maximum extreme wet event increases throughout the world. For example, it triples in Southeast Asia. The absolute magnitude of these 30-year-maximum events is also greater throughout the world in the future, with peak increases of more than 40 percent in Southeast Asia. All countries exhibit substantial increases in the frequency and magnitude of extreme hot events as well as extreme drought years, although there are a few that have less frequent or less intense drought years in the future.

In addition to describing the magnitude and spatial heterogeneity of changes in climate volatility, the study also quantifies the vulnerability of developing countries to current climate volatility by simulating the response of productivity in the grain sector to once-every-30-years climate events, for a sample of 16 developing countries. The study's key findings include:

Urban wage-laborers are most vulnerable due to extreme exposure to food price increases

- Bangladesh, Mexico, Mozambique, Malawi, Tanzania and Zambia were among countries with the highest shares of population entering poverty in the wake of extreme events.
- There was tremendous heterogeneity in the impact on poverty levels across different segments of the population, when differentiated by primary income source. The urban, wage-labor dependent stratum was the most vulnerable group, even though it contributed modestly to total poverty in the sample of countries. The poverty rate for this group doubled in Malawi under the extreme event. Food is a major expenditure for the urban poor. As food prices rise, this group's overall consumption falls with rising prices, which pushes it below the poverty threshold of consumption.
- Farmer households were hurt by the adverse productivity shock, but the value of their farm output rose due to higher food prices. As a result, these households were generally much less sensitive to climate extremes.

These results suggest that, given the expected decrease in the share of developing country populations living in rural areas by more than one-third between 2010 and 2050, climate extremes of a specific magnitude may have a greater impact on poverty at the national level in the future than they do now, due to higher population concentrations in urban areas in developing countries.

Finally, the study suggests that adaptation responses, such as irrigation investments, could reduce the decline in agricultural productivity resulting from extreme events like drought, thereby mitigating the events' impact on poverty. However, even when farmers are aware of the need for adaptation, they may face barriers such as information and credit constraints. Policy responses to changes in climate variability should thus aim to create an enabling institutional environment that is required in addition to investments in infrastructure in order to protect vulnerable populations against poverty.

Syud Amer Ahmed, Noah Suresh Diffenbaugh and Thomas Hertel. Forthcoming. "Climate volatility deepens poverty vulnerability in developing countries." Environmental Research Letters.

(continued from page 1)

demand for goods. As of April 2009, US imports of goods were 34 percent lower than a year ago, while exports dropped by 27 percent over the same period. In contrast, imports and exports of services declined by only about 10 percent. Furthermore, trade in business, professional and technical services continued to grow albeit at diminished rates. Finally, exports of countries like India that are relatively more specialized in services have contracted substantially less than exports of countries and regions like Brazil and Africa where services are less important. (See figure 3.)

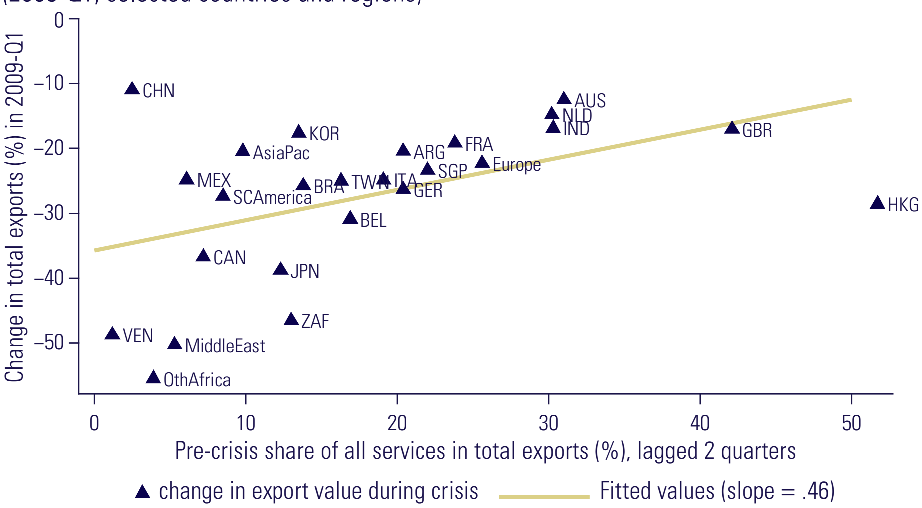
These results support the claim that slumping demand, destocking of inventories, and financial constraints are the main drivers of trade's dismal performance. Services are not storable and are not subject to the inventory effect that has contributed to the rapid fall of merchandise trade flows. Moreover, trade in many business services commonly referred to as "business process outsourcing" is less dependent on external finance, which further insulates services trade from the negative impact of tightening credit conditions.

Caroline Freund. Forthcoming. "The Trade Response to Global Downturns: Historical Evidence." Policy Research Working Paper 5015. World Bank, Washington, DC.

Leonardo Iacovone and Veronika Zavacka. Forthcoming. "Banking Crises and Exports: Lessons from the Past." Policy Research Working Paper 5016. World Bank, Washington, DC.

Ingo Borchert and Aaditya Mattoo. 2009. "The Crisis-Resilience of Services Trade. Policy Research Working Paper 4917. World Bank, Washington, DC.

Figure 3. Change in the Value of Exports to the US and Share of Services in Exports (2009-Q1, selected countries and regions)



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