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Lessons for Japanese foreign aid from research on aid's impact

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Abstract: Japan has an impressive history when it comes to aid, industrial policy, and infrastructure development, both as a country that saw meteoric development of its own, and as a country that has been one of the world's largest donors for decades. Looking towards an uncertain future in which infrastructure must be made resilient towards climate change, and the value of aid is questioned, few actors can offer more useful experience. Restoring structural transformation as a donor priority, and recognizing the critical role it played in the development of Japan, is a vital step towards making the real gains aid has provided in human security sustainable. Infrastructure investment can not only reduce spatial inequality, and provide the basis for growth through inter-connected regions and economic hubs, with enhanced national analytical capacity, and technical assistance to project preparation, it can help to provide the public goods that resonate most with Japan's vision of human security.

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1 Introduction

Japan has provided foreign aid for some 60 years. Japan's aid has grown and evolved as Japan became richer and as the developing world changed too. Japan is a strong supporter of the Millennium Development Goals (MDGs), and revised its official development assistance (ODA) charter in 2003 to place poverty reduction at the centre of aid policy. Japan's concept of human security is even more relevant today than when it was first conceived; conflict, natural disaster, and climate change threaten to reverse humanity's progress. Now, with 60 years of experience behind it, Japan is evaluating its aid policy and modalities, and asking what contribution it can make to the developing world after 2015.

As Japan looks to the future, what insights can be found in the research literature on aid? How might this contribute to Japan's new aid strategy? This is the focus of our paper. Ultimately, every donor's aid policy must strike a balance between competing goals. The final allocation of aid (across sectors, countries, and modalities) reflects the overarching framework of foreign policy as well as past experience. These define what the donor sees as its particular comparative advantage. Accordingly, in this paper we try to avoid being over-prescriptive, while endeavoring to draw attention to what Japan might find useful in the literature on aid and its impact.

As donors consider their strategy, they inevitably look to what their aid has contributed to development. The research literature on aid provides insights and, in our view, gives a more positive picture of aid than its critics allow. The first part of our paper discusses what this literature tells us about aid's relationship to human development and economic growth. The second part of the paper turns to what aid might do next. Here we focus on structural transformation, and its interconnection with infrastructure and employment. Japan stands out as a donor in this area, and is itself one of history's biggest success stories in development. The international donor community now wants to help create jobs, but it drifted away from structural transformation after the 1980s. Donors must return to the challenge—which today includes green growth—and Japan has much experience to offer. Moreover, structural transformation is also about building resilient societies, as development is too easily damaged by natural disaster and other shocks. The transformation challenge is therefore closely linked to Japan's vision of human security.

Yet donors must also build on aid's existing success in human development with further support. As the social sectors already account for a substantial share of aid, donors will find it difficult to provide significant aid for structural transformation and the creation of better livelihoods if the volume of aid stagnates. They will need to leverage more private capital, both domestic and foreign. We conclude that tough choices lie ahead, and research has an important role to play in informing the future of aid strategy in Japan as in other donor countries.

2 What has aid achieved?

It is fashionable to write off aid, to talk up its failures and ignore its successes. ODA is also smaller than foreign direct investment (FDI), portfolio flows, and remittances, leading some to argue that aid is increasingly marginal. As Japan reconsiders its aid strategy, it is important to avoid an inaccurate view of aid's impact, and to understand aid's comparative advantage vis-à-vis private capital flows.

Let us start with the social sectors. There has been significant progress towards universal primary education. While the quality of education across the world is not yet sufficiently high, we do see real progress on enrollment. For sub-Saharan Africa (SSA), the region with the lowest primary school enrolment rates, figures have improved from 57 to 78 per cent for boys and from 50 to 74 per cent for girls in just 20 years (1990–2010) (UNU-WIDER 2014a). Child health is showing an improving trend (though not in conflict-affected fragile states). In 1980, only 17 per cent of children in the developing world were immunized against diphtheria-tetanus-pertussis; by 2011, more than 80 per cent of children were regularly immunized. This is a remarkable achievement. Maternal mortality has also fallen significantly, from 543,000 in 1990 to 287,000 in 2010—a 47 per cent improvement despite rising population.

Success has many parents. What did aid contribute? Arndt et al. (2013) find that an average annual inflow of US$25 aid per capita over the period of 1970-2007 augmented average schooling by 0.4 years, boosted life expectancy by 1.3 years, reduced infant mortality by 7 in every 1000 births, and reduced poverty by around 6.5 percentage points. This is a significant achievement: not in every country, nor all the time, but broadly over nearly 40 years.

The MDGs focused donors and governments on human development. The social sectors rose to 40.0 per cent of OECD-DAC bilateral commitments by 2011. New global funds in health as well as private philanthropy have massively increased support for health provision (UNU-WIDER 2014a: 16). Maternal and child mortality has almost been cut in half over the last two decades in Sri Lanka, Niger, Ghana, and Mexico (to cite just a few countries)—an exceptional success, supported by aid (Bhutta and Aleem 2013; UNU-WIDER 2014a). Worldwide, some 400,000 polio cases were registered on an annual basis in the 1980s; this has now dropped to less than a thousand. By 2000 polio had been eradicated in western Asia, with development co-operation between Japan and China playing its part (Kato 2014). Aid has funded large-scale programmes to contain and reduce the prevalence of HIV/AIDS, which 30 years ago looked likely to devastate whole societies.

These successes sit at odds with the most virulent criticism of aid. For sure, donors can and do overplay their contribution: the human stories in education and health help mobilize political support for aid, both official and charitable. Some of the education and health success is down to economic growth. This puts more money into the pockets of poorer households, enabling them to buy private provision. So these trends are not just the result of public provision supported by aid.

While success is evident, complacency must be avoided. The numbers are stark reminders of human insecurity. Some 215 million women lack access to modern contraceptives worldwide. Maternal mortality remains high in SSA. HIV/AIDS, tuberculosis, and malaria still account for about five million deaths annually (UNU-WIDER 2014a). Conflict in countries like South Sudan stalls basic service delivery.

Health is a global public good, making it in everyone's interest to end epidemics such as Ebola. Aid for human development also complements and encourages private flows: they are not substitutes. Health emergencies discourage private capital. FDI into mining has assisted Liberia and Sierra Leone with post-war reconstruction, but is now delayed by Ebola. Households can buy more healthcare using remittances. But remittances cannot fund a sound and universal health-care system—a cornerstone of human security—to deal with extreme public health emergencies.

There is still a great deal of work for aid to do in human development. Squeezing better outcomes from existing resources is important, including the reduction of aid fragmentation (Furukawa 2014). For all donors, there is a need to shift aid towards more efficient ways of delivery than projects, which still dominate bilateral aid to the social sectors, especially in education but also in health (Blanchet et al. 2014; Riddell 2012). In 2011 (six years after the Paris Declaration) more than two-thirds of aid to the social sectors was disbursed as projects, despite evidence that fungibility is not in practice a major problem (UNU-WIDER 2014a: xiii). In summary, aid policy can draw upon strong evidence on what works in human development and what needs improving.

While the MDGs have given prominence to the social sectors, human development is only part of the overall development picture. Prosperity also depends on achieving sustainable growth, as does exiting aid dependence. Domestic revenues rise with growth, FDI likes a larger market, bigger economies attract more portfolio flows, and growth facilitates debt-service. Accordingly, we now turn to the research evidence on aid and growth.

Growth is another development outcome with many parents. Because aid is only one possible determinant, it really does matter that we get the research right (Arndt et al. 2011a). A coherent body of evidence is now available, pointing to a positive and statistically significant impact of aid on growth (UNU-WIDER 2014b). An inflow of aid in the order of 10 per cent of GDP spurs the per capita annual growth rate by more than one percentage point in the long run (Arndt et al. 2011b: 23). Using time series data for 36 SSA countries, from the mid-1960s to 2007, Juselius et al. (2014) find that in 27 cases aid has a positive long-term impact. Aid does provide a respectable internal rate of return: 7.3 per cent is one estimate (Arndt et al. 2014).

This evidence casts doubt on the criticism that aid inflows have the same perverse effect on growth as oil and other resource wealth (Moyo 2009 asserts this). In principle, any inflow (aid, resource revenues, and remittances) can cause a real exchange rate appreciation, damaging incentives to produce exports and import-substitutes. However, macro-economic policy can act to limit the real appreciation (Addison and Baliamoune 2013). Moreover, aid's critics ignore aid's potential to improve the supply-side of the recipient's economy.

When capacity utilization is held back by foreign exchange shortages, aid relaxes the constraint. Manufacturers can then import materials, and farmers can get inputs. This was important to low-income economies as they struggled in the 1980s, and in war-damaged economies as well. Aid had this supply-side effect in Ethiopia, Mozambique, and Uganda as they began their post-conflict recoveries some 20 years ago.

Second, by supporting basic health care and primary education, aid helps build human capital. This raises the recipient economy's overall growth potential. Rising labour productivity and the movement up value-chains to increasing levels of skill characterize successful diversification of an economy's supply-side. This does not, however, happen overnight; it starts when healthy and educated young adults enter the workforce.

Third, aid improves an economy's growth potential when it finances infrastructure to increase the connectivity of markets (UNU-WIDER 2014b). Rehabilitation of transport infrastructure is vital to war-damaged economies, especially to ease the movement of food. Likewise, long-run growth is raised by measures to improve productivity, support state-business interactions that yield investment, and attract FDI. These are dimensions of structural transformation that aid can support.

3 What can aid do next? Structural transformation as a challenge

Structural transformation entails the creation of new sectors with greater value added than traditional sectors and the movement of capital (and especially labour) from low- to higher-productivity occupations. This in turn raises productivity and per capita income over time. Agriculture's share of total output and employment falls (although agriculture's total output may still grow as agricultural productivity rises). The economy diversifies away from commodity exports to manufactured products (and increasingly services) of rising skill-intensity, with more formal-sector jobs. Whereas improved basic service delivery can improve education and health outcomes at low levels of per capita income, sustained progress depends on growth providing additional resources. Successful transformation therefore helps to widen humanity's fundamental freedom in all its forms—a core tenet of Japan's doctrine of human security (Kamidohzono et al. 2014).

Structural transformation was central to international aid in its first decades, with grants and loans supporting projects in the productive sectors (agriculture, manufacturing etc.) as well as infrastructure. Japan itself used the country's first World Bank loan to reclaim land and increase production and yields in Hokkaido (IBRD 1956). Japan borrowed US$863 million from the World Bank over 1953-1966 for transport, power, and industry (Abe and Katsu 2014). This aid helped make Japan a wealthier society and, starting in the 1950s, Japan's own aid supported the productive sectors in partner countries, assisting South East Asia and China onto their transformational pathways.

Intellectually, and as a guide to aid strategy, structural transformation was a priority in the donor community until the early 1980s. The World Bank's research department under Hollis Chenery was at the frontier in measuring and analysing structural transformation, contributing a body of knowledge that helped shape development economics (Chenery and Syrquin 1975). A shift in thinking then occurred in the 1980s, as donors led by the World Bank refocused on price incentives, set in newly liberalized markets, as a key driver of economic development (Addison 2014). The word 'structural' was still used, now attached to 'adjustment', in the programme lending that supported liberalization. Structural transformation was largely reduced to 'getting prices right' (plus securing property rights). Following liberalization, agriculture's share of aid fell, as donors seemingly ignored the evidence that agricultural takeoff requires more than market incentives (UNU-WIDER 2014b). Japan was the exception, as it continued with large-scale investments in projects like Indonesia's Brantas River Basin (Kato 2014).

Aid to agriculture is today only 9 per cent of total aid, down from its mid-1980s peak of 23 per cent (OECD 2012). This is surprising given ample research on the interrelationship of agriculture and poverty. On average a 1 per cent (annual) increase in agricultural growth yields up to 2 to 3 per cent of income growth for the poor in the developing world (World Bank 2007, 30; de Janvry and Sadoulet 2009: 6). Aid policy is supposed to be evidence-based and it is supposed to be poverty-focused. Yet, the sector that provides many of the poor with a livelihood has suffered neglect compared to its prioritization in aid's earlier years.

Paradoxically, the pro-market shift of the 1980s occurred at a time when East Asia's growth was accelerating, the result of state-business partnerships that differed markedly from the models of the western donors and Bretton Woods institutions. Japanese and East Asian policy makers favoured industrial policy, in contrast to its dismissal by the 'Washington Consensus' (Ishikawa 2005; Page 2014). Economists of the Washington Consensus sought to highlight the external orientation of East Asia's success; this fitted comfortably with the principle of comparative advantage, which underpinned their worldview (Balassa 1989; Krueger 1983). Simultaneously, they ignored ample evidence from research that some forms of industrial policy work well, as they did in Asia's export-led success (Addison 2014).

A development model that was out of favour with the majority of donors had provided the wealth for Japan to become the world's largest aid donor (in 1989), some 20 years after it became the world's second largest economy (in 1968): a remarkable achievement for a country that was an aid recipient in the 1950s and early 1960s. China, South Korea, Taiwan, and much of Southeast Asia grew strongly in the 1980s, while Africa and Latin America experienced a lost development decade: their economies were stabilized with donor support (macro-imbalances were brought under control) but structural adjustment did not yield structural transformation.

Whereas donor discourse in the 1980s at least retained a focus on 'structure' (albeit in a very narrow market-orientated way), concern for structure fell away in the 1990s amongst donors. This was reinforced by the adoption of the MDGs with their attention to human development (and this was successful, as we discussed earlier). The center of attention shifted to achieving donor-recipient agreements around the allocation of public spending, with priority to basic service delivery, financed by aid and guided by poverty reduction strategy papers (PRSPs). These gave little, if any attention to the role of economic structure in driving livelihood improvement. The liberalization ethos of the 1980s lives on in the World Bank's 'Doing Business' programme but this is an inadequate lens through which to make policy for private-sector development (Page 2012). Studies of enterprise development show that finance and infrastructure are now perceived as bigger constraints on private-sector investment than over-regulation (UNU-WIDER 2014b).

Japan remained an exception in the donor community, and continued to emphasize the role of well-articulated industrial policy to bring the state and business together to deliver on ambitious investment and growth goals. Japan has continued to emphasize the role of industrial policy in catalyzing structural transformation. But this development philosophy has not had much resonance with the larger donor community (Page 2014). Japan's communication of the development paradigm underlying its aid has been made difficult by the numerous agencies that were involved in providing aid, which did not always deliver the same message (Tsunekawa 2014).

In summary, while the research evidence points to aid's positive impact on overall growth, aid can be faulted for not giving enough attention to the quality of that growth. This can be seen in the way that structural transformation increasingly took a back seat from the 1980s onwards, having been to the fore of development co-operation previously. One especially important dimension of transformation is infrastructure, to which we now turn.

4 Infrastructure for structural transformation

Infrastructure investment was central to Japan's rapid growth from the Meiji period onward. Japanese industrial policy emphasized linkages between new industrial estates and ports to facilitate exporting. Japan used its World Bank loans for infrastructure, including the New Tokaido Line and its famous 'bullet train' in the early 1960s (Fujikura and Nakayama 2014). Aid for infrastructure and industry increasingly featured in Japanese aid from the 1960s onwards (Kodera 2014). Notable projects include Thailand's Eastern seaboard and the economic corridor in Vietnam, both acting as catalysts for FDI as well. The Tokyo International Conference on African Development (TICAD)—a framework for Africa-Japan development co-operation—highlights infrastructure in the region (Cornelissen 2014).

Well-designed infrastructure encourages private investment. Mallaye and Urbain (2013) find that aid for infrastructure positively and significantly affected physical capital formation in 37 SSA countries over 2000-10. Infrastructure also unlocks the constraint of connectivity that contributes to high spatial inequality in incomes and human development. Japan used infrastructure investment to overcome its own difficult geography and terrain, connecting regions to economic hubs, which consolidated a sense of nationhood and citizenship. Fragile states are marked by regional grievances that feed violent secession; citizens in remote regions feel no sense of affiliation to a nation that neglects them (Addison 2012; Addison and Brück 2008). In Mali, for example, there is no road linking the south with the neglected north, and the center's denial of infrastructure to the north has fed the present instability (van de Walle 2012: 15). Infrastructure investment to reduce spatial inequality can be a powerful means for donors to engage with one cause of political fragility and conflict. It can support wider governance initiatives, and it is in line with Japan's human security agenda, as infrastructure expands opportunities and freedoms.

One crucial opportunity is employment, a new concern for donors, signified by the 2013 World Development Report on jobs (World Bank 2013) and highlighted by the unemployed youth of fragile states (del Castillo 2012). Infrastructure is intimately linked to job creation. Aid in the livelihoods area is typically project-based, small-scale, and uncoordinated (UNU-WIDER 2014b, 18). It might create hundreds of jobs, but not the millions required to have impact at scale. In contrast, impact at scale is achieved by infrastructure of the right kind. It can do so in construction and maintenance. Ethiopia's Productive Safety Net Programme (PSNP) is one example: it is financed by a donor consortium and provides work on infrastructure projects to 7 million people (8 per cent of the population) in food-insecure districts (World Bank 2012). Infrastructure also creates jobs indirectly by stimulating economic activity, and trans-border transport infrastructure that reduces the costs of exporting is a valuable job-creator. The evidence also shows that wages in export industries contain an export premium (UNU-WIDER 2014b). Infrastructure is closely linked to industrial policy in building the capacities of countries to compete in the global economy for manufacturing and high-value services, thereby creating good jobs (Page and Shimeles 2014). This is an area where Japanese aid has long-standing experience and has achieved considerable success in Asia (Shimomura 2014).

Infrastructure is an important dimension of the resilience goal: improving society's ability to meet and cope with shocks. Again, Japan with its vulnerability to earthquakes has long and hard-won experience in building resilience. Adaption to climate change is an area where resilience strategies have increasing urgency. Developing countries have a high climate-sensitivity and a generally low adaptive capacity. They must adapt to a warming climate, but their problem of adaption is compounded by uncertainty around changes in the quantity and distribution of rainfall. Will their future be drier or wetter? We do not know. Consequently, countries need strategies that are robust with respect to a wide range of climate outcomes, especially in infrastructure (UNU-WIDER 2014c).

By 2030, climate change adaption and mitigation costs for developing countries are estimated to be in the range of US$140-175 billion for mitigation and US$75-90 billion for adaption (Addison et al. 2011). Aid can neither substitute for an agreed, robust and effective international climate agreement, nor pay the total bill to 'climate proof' development (in infrastructure and other ways) in a 'climate-constrained' world (Arndt and Bach 2011). To fill the funding gap, aid will need to leverage in more private funding. Energy is a key investment. Countries need to shift away from dirty energy (coal in southern Africa, for example) to renewables. But the initial investment costs of renewables are high, and aid as well as public money needs to do more to stimulate the initial investments (UNU-WIDER 2014c).

Despite the importance of infrastructure to development (and now to climate change), the share of infrastructure in ODA fell from 27 per cent in the mid-1990s to 18 per cent by 2006 (World Bank 2008: 9). The supply of donor aid for infrastructure has become highly concentrated. By 2006, two bilateral donors (Japan and the United States) and two multilateral donors (International Development Association and the EC) provided about half of all OECD-DAC aid for physical infrastructure (transport and storage, communications, and energy) (World Bank

2008: 9). Japan's support for infrastructure has been the highest of any donor, with a notably positive impact (Kato 2014).

Infrastructure finance is beginning to strengthen again as a priority across the broader donor community, a sign that economic structure is resurfacing as a concern (together with the creation of green economies). A renewed infrastructure focus is characterized by a greater emphasis on using aid to leverage private and public money for infrastructure funding. One promising initiative is the 'Africa50' fund launched by the African Development Bank (AfDB) in 2014. With an initial equity capital of US$3 billion (including US$500 million from AfDB itself) this aims to achieve an equity capital of US$10 billion. In turn, the Africa50 fund will leverage up to US$100 billion from private and government funding. The Asian Development Bank (ADB) is similarly engaged in blending private and public money for infrastructure investment. This is certainly the way of the future, given the huge scale of funding required, which neither aid nor tax revenues can (or should) fund alone.

Infrastructure is becoming an area of donor competition, with the creation of the BRICS bank and the Asian Infrastructure Investment Bank (AAIB), initiated by China. Traditional donors have stayed away, or have not been invited. Non-traditional donors are also providing more infrastructure finance bilaterally: China committed US$14 billion to infrastructure finance from 2001 to 2009 (Chen 2010: 14). Meanwhile traditional donors, including Japan, are focusing on the ADB and the World Bank. This competition between donors fragments aid even further, and has taken on a geopolitical character. Yet, since infrastructure is a public good it is unlikely that any donor supplying finance can reap much long-term commercial advantage. Building a new transport link reduces transport costs for everyone, domestic and foreign investors alike, irrespective of whether they contributed to financing the project.

Finance is not the only constraint on infrastructure investment. Establishing a pipeline of good projects with high social returns and positive environmental impacts is perhaps equally important. Today, many observers such as the ADB cite project identification and design as a constraint that can be as hard as finance. Getting projects close to implementation takes time, and much work, including environmental impact assessment. Moreover, the economics of infrastructure appraisal now looks beyond the rather narrow lens of conventional cost-benefit analysis to incorporate network effects and the impact of infrastructure in the creation of regional catalysts for growth. There is fortunately today a greater concern for the social impact of infrastructure than in the past, including population displacement and the gender dimension. All this must be incorporated into the investment appraisal as well.

National analytical capacity therefore needs upgrading to deal with all these aspects of infrastructure appraisal, and technical assistance is valuable to even middle-income countries. Japan is well placed given its extensive experience in infrastructure both at home and abroad. Capacity building has long been a feature of Japanese support for infrastructure, in the tradition of kaizen (continuous improvement) and gemba (in the work place and in the field) (Kato 2014). Indeed, technical assistance associated with the first World Bank loans to Japan helped the future donor upgrade its own expertise in project appraisal (Fujikura and Nakayama 2014).

Infrastructure illustrates the role that aid plays vis-à-vis other forms of capital inflow. Remittances are at least treble the amount of global ODA. But remittances cannot build infrastructure of the scale and complexity of a major river bridge. Neither is private capital able to fund such work entirely since bridges are classic public goods (which are underprovided by private action). To take one example, the Jamuna bridge in Bangladesh was financed by bilateral and multilateral aid, including considerable support from Japan. It was not only the finance that got Jamuna built but also the technical work on its advanced design to cope with the shifting natural environment of the river, expertise that was not available locally. Development co-operation is therefore not just about finance, it is also about advanced technical skills and their transfer.

5 Final observations and conclusions

This paper has argued that research on aid's impact does not support the dismal picture of aid effectiveness that popular critics paint. Aid has made a strong contribution to progress in human development, and this has accelerated since the MDGs. Aid's contribution to overall economic growth has also been broadly positive, taking into account other determinants. That said, aid has not been beneficial in all places, or at all times. There are certainly instances where aid, like any other development intervention, has failed to meet its objectives. Aid proliferation, unpredictability and fragmentation lower the benefits of aid (Kimura et al. 2012; Kodama 2012). Co-ordination among donors seems to be especially weak in aid to the productive sectors, resulting in small projects rather than impact at scale (Bourguignon and Platteau 2013). Development co-operation is most difficult in fragile states when peace-keeping and diplomacy are inadequate or ineffective (Addison and Brück 2008; Murotani 2014). Aid can also be a volatile source of development finance (Hudson 2012). Aid recipients would be well advised to maximize domestic revenues, and seek out private capital flows that can contribute to development in ways that aid cannot. Donors increasingly provide help in these two tasks.

Poverty reduction cannot be reduced to just providing health-care, education or social protection, vital as these all are. Better and more remunerative livelihoods are crucial. Indeed they facilitate the expansion of personal freedom that is part of human security. Good jobs are created by structural transformation that helps people move out of less productive and into more productive sectors and occupations. Issues of structure and transformation were a feature of development economics and development co-operation in the first three decades from the 1950s onwards: it is time to return to them. When infrastructure investment is done well it can lift millions out of poverty, in ways that small project interventions cannot. Infrastructure finance is one constraint, but so too is the project pipeline: more technical assistance needs to go into project preparation. Japan, with its long experience in this area, should continue to make a major contribution.

Going to scale in impact must be a core objective if aid is to effectively support the post-2015 development agenda. For donor countries, the composition of their ODA is a political choice. Continuing with aid to the social sectors is a safe choice, it is certainly valuable, and its benefits are supported by research evidence: maintaining progress in human development remains a priority beyond 2015. More ambitious and more risk-tolerant donors will embrace the structural change agenda as well, and marry this to environmental sustainability (Addison et al. 2013). However, there is a tension within aid allocation. The social sectors account for some 40 per cent of total ODA, and it would be highly undesirable to reduce the growth of funding in this area given the successful results to date. Yet, faster poverty reduction is unlikely to be achieved without more support to countries in improving the livelihoods of poor people via structural transformation. If aid stagnates or even declines, it will be difficult (and probably impossible) to achieve all these priorities post-2015.

The years since the start of Japanese aid in the 1950s have seen the world change in ways that the early pioneers of development co-operation could hardly begin to imagine. Aid and its architecture were created to fill financing gaps in a world where official rather private capital flows dominated, and one in which foreign exchange was scarce for poor countries. While today's low-income countries still find aid useful in filling their financing gap, the sources of finance have multiplied; private flows, both FDI and portfolio, seek out opportunities even in some of the poorest parts of the globe. Increasingly the role for aid is seen as a catalytic one, leveraging in private finance (Kharas and Biau 2014). That it should be viewed in this way is also a consequence of development success, to which aid contributed, not least as a result of Japanese development co-operation in Asia. Sustained growth has created the domestic revenues, and encouraged private capital inflow, which now finance development (though filling the finance gap remains important for the least developed countries, and those in recovery from conflict). The early pioneers of international development were optimists, but even they would be surprised by Asia's remarkable economic transformation, and they would be heartened by the better prospects now evident in Africa.

Alongside its catalytic role, aid is also increasingly seen through the lens of global public goods; contributing to the protection and enhancement of global health (a goal that has especial urgency in the present Ebola emergency) and to the adaption and mitigation required by climate change (a challenge that no pioneer of development would have recognized). Peace is another global public good. Aid continues to be seen as important in complementing diplomacy in ending conflict, easing war-to-peace transition, and dampening instability by making development more inclusive. But with some wars being hard to resolve, and having mutated and crossed borders, there is less optimism than a decade ago about how best to use development assistance in getting traction on conflict-prevention and resolution (Addison and Brück 2008; UNU-WIDER 2014d). Despite the difficulties, it is clear that aid's multiple roles in the area of global public goods do resonate with Japan's vision of human security. This provides a future role for aid, irrespective of national successes in moving from low-income to middle-income status (and beyond), which reduce aid's role in filling financing gaps.

How the existing aid architecture will evolve to meet these changes and challenges is a matter of speculation. Better aid co-ordination in practice, and not just in rhetoric, would generate efficiency gains on the supply-side of aid that would reduce the transactions costs for donors and recipients (Kharas et al. 2011; UNU-WIDER 2014b). Bigsten and Tengstam (2012) calculate that an annual saving of US$915 million could be achieved by reducing aid disbursed via projects and increasing programme assistance to 66 per cent of total aid (the Paris target) from its level of 39 per cent in 2009 (Bigsten and Tengstam 2012). Total donor savings of more than US$2 billion per year could be achieved by reducing the number of partner countries that each donor deals with, and by shifting to programme rather than project aid.

We are not, however, confident that deeds will match words. New donors (national, business, and philanthropic) must be drawn into a closer working relationship with traditional donors. But this will require a spirit of co-operation on all sides. Realistically, aid will always be an instrument of geopolitical competition, but all parties should realize that there are higher goals—avoidance of catastrophic climate change, conflict prevention and resolution, and global public health—that transcend narrower interests, and require international co-operation. Indeed, these global goals are matters of national interest. No nation can avoid the consequences of global climate change, the spillover of conflict, terrorism and refugees, nor the diseases that cross borders with impunity.

References

Abe, Y. and S. Katsu (2014). 'The World Bank and Japan'. Paper for the JICA-RI project on *Japan and the developing world: Sixty Years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Addison, T. (2012). 'The political economy of fragile states'. In G.K. Brown and A. Langer (eds), *Elgar handbook of civil war and fragile states*. Cheltenham: Edward Elgar.

Addison, T. (2014). 'Development'. In P. Burnell, V. Randall, and L. Rakner (eds), *Politics in the developing world*. Oxford: Oxford University Press.

Addison, T., C. Arndt, and F. Tarp (2011). 'The Triple Crisis and the Global Aid Architecture'. *African Development Review*, 23(4): 461-78.

Addison, T., and M. Baliamoune (2013). 'Aid and Dutch disease: Evidence from Moroccan and Tunisian time-series data'. WIDER Working Paper 2013/132. Helsinki: UNU-WIDER.

Addison, T., and T. Brück (2008). *Making peace work: The challenges of social and economic reconstruction*. Basingstoke: Palgrave Macmillan for UNU-WIDER.

Addison, T., S. Singhal, and F. Tarp (2013). 'Aid to Africa: The changing context'. WIDER Working Paper 2013/144. Helsinki: UNU-WIDER. (Forthcoming) in J. Y. Lin and C. Monga (eds), *Oxford handbook of Africa and economics*. Oxford: Oxford University Press.

Arndt, C., and C.F. Bach (2011). 'Foreign assistance in a climate-constrained world'. WIDER Working Paper 2011/66. Helsinki: UNU-WIDER.

Arndt, C., S. Jones, and F. Tarp (2011a). 'Aid effectiveness: Opening the black box'. WIDER Working Paper 2011/44. Helsinki: UNU-WIDER.

Arndt, C., S. Jones, and F. Tarp (2011b). 'Aid and growth: Have we come full circle?'. *Journal of Globalization and Development*, 1(5): 1-29.

Arndt, C., S. Jones, and F. Tarp (2013). 'Assessing foreign aid's long-run contribution to growth in development'. WIDER Working Paper 2013/072. Helsinki: UNU-WIDER.

Arndt, C., S. Jones, and F. Tarp (2014). 'What is the aggregate economic return to foreign aid?'. WIDER Working Paper 2014/089. Helsinki: UNU-WIDER.

Balassa, B. (1989). *Comparative advantage, trade policy and economic development*. London: Harvester Wheatsheaf.

Bhutta, Z., and S. Aleem (2013). 'A review of external assistance and aid effectiveness for maternal and child health: Challenges and opportunities'. WIDER Working Paper 2013/099. Helsinki: UNU- WIDER.

Bigsten, A., and S. Tengstam (2012). 'International co-ordination and the effectiveness of aid'. WIDER Working Paper 2012/032. Helsinki: UNU- WIDER.

Blanchet, N., M. Thomas, R. Atun, D. Jamison, F. Knaul, and R. Hecht (2014). 'Global collective action in health: The WDR+20 landscape of core and supportive functions'. WIDER Working Paper 2014/011. Helsinki: UNU-WIDER.

Bourguignon, F., and J.-P. Platteau (2013). 'The hard challenge of aid co-ordination'. WIDER Working Paper 2013/073. Helsinki: UNU-WIDER.

Chen, V. (2010). 'Chinese participation in infrastructure development in Africa'. Paper presented at the China DAC Study Group Meeting, 19-21 September, Beijing, China.

Chenery, H.B., and M. Syrquin (1975). *Patterns of development, 1950-1970*. London: Oxford University Press.

del Castillo, G. (2012). 'Aid, employment and inclusive growth in conflict-affected countries: Policy recommendations for Liberia'. WIDER Working Paper 2012/047. Helsinki: UNU-WIDER.

Cornelissen, S. (2014). 'Japan's official development assistance to sub-Saharan Africa: Patterns, dynamics, lessons'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

de Janvry, A., and E. Sadoulet (2009). 'Agricultural growth and poverty reduction: Additional evidence'. *The World Research Observer*, 25(1): 1-20.

Fujikura, R., and M. Nakayama (2014). 'Origins of Japanese aid policy: Pre-war colonial administration, post-war reconstruction, reparation and World Bank projects'. Paper for the JICA-RI project on *Japan and the Developing World: Sixty Years of Japan's Foreign Aid and the Post 2015 Agenda*. Tokyo: JICA Research Institute.

Furukawa, M. (2014). 'Aid fragmentation and effectiveness for infant and child mortality and primary school completion'. JICA-RI Working Paper 83. Tokyo: JICA Research Institute.

Hudson, J. (2012). 'Consequences of aid volatility for macroeconomic management and aid effectiveness'. WIDER Working Paper 2012/035. Helsinki: UNU-WIDER.

IBRD (1956). 'Report and recommendations of the President to the executive directors concerning a proposed loan to the Agricultural Land Development Machinery Public Corporation'. Report P-123. Washington DC: International Bank for Reconstruction and Development.

Ishikawa, S. (2005). 'Supporting growth and poverty reduction: Toward mutual learning from the British model in Africa and the Japanese model in East Asia'. JBICI Discussion Paper 8. Tokyo: Japan Bank for International Cooperation.

Juselius, K., N.F. Møller, and F. Tarp (2014). 'The long-run impact of foreign aid in 36 African countries: Insights from multivariate time series analysis'. *Oxford Bulletin of Economics and Statistics*, 76(2): 154-84.

Kamidohzono, S.G., O.A. Gómez, and Y. Mine (2014). 'Embracing human security: New directions of Japan's ODA for the 21st century'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Kato, H. (2014). 'Japan's bilateral ODA 1954-2014: An overview'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Kharas, H., and J. Biau (2014). 'New actors, new instruments, new priorities: Towards a sustainable development transformation'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Kharas, H., K. Makino, and W. Jung (eds) (2011). *Catalyzing development: A new vision for aid.* Washington DC: Brookings Institution Press.

Kimura, H., Y. Mori, and Y. Sawada (2012). 'Aid proliferation and economic growth: A cross-country analysis'. *World Development*, 40(1): 1-10.

Kodama, M. (2012). 'Aid unpredictability and economic growth'. *World Development*, 40(2): 266-72.

Kodera, K. (2014). 'Japan's engagement with multilateral development banks: Do their professional paths really cross?'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Krueger, A.O. (1983). *Trade and employment in developing countries*. Chicago: University of Chicago Press.

Mallaye, D., and Y.T. Urbain (2013). 'Foreign aid and mobilization of growth factors in sub-Saharan Africa'. WIDER Working Paper 2013/103. Helsinki: UNU-WIDER.

Moyo, D. (2009). *Dead aid: Why aid is not working and how there is a better way for Africa*. New York: Farar, Straus and Giroux.

Murotani, R. (2014). 'The 'fragile states' agenda in the post-2015 development framework: Significance and caveats'. In JICA-RI (ed.), *Perspectives on the post-2015 development agenda*. Tokyo: JICA Research Institute.

OECD (2012). 'Statistics on resource flows to developing countries'. Paris: Organization for Economic Co-operation and Development.

Page, J. (2012). 'Aid, structural change and the private sector in Africa'. *WIDER Working Paper* 2012/021. Helsinki: UNU-WIDER.

Page, J. (2014). 'The East Asian miracle and development policy: A twenty-year retrospective'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Page, J., and A. Shimeles (2014). 'Aid, employment and poverty reduction in Africa'. WIDER Working Paper 2014/043. Helsinki: UNU-WIDER.

Riddell, A. (2012). 'The effectiveness of foreign aid to education: What can be learned?'. WIDER Working Paper 2012/075 Helsinki: UNU- WIDER.

Shimomura, Y. (2014). 'The political economy of Japan's aid policy trajectory: With particular reference to the changes and continuity under the ODA charter'. Paper for the JICA-RI project on *Japan and the developing world: Sixty years of Japan's foreign aid and the post 2015 agenda*. Tokyo: JICA Research Institute.

Tsunekawa, K. (2014). 'Objectives and institutions for Japan's official development assistance (ODA): Evolution and challenges'. JICA-RI Working Paper 66. Tokyo: JICA Research Institute.

UNU-WIDER (2014a). 'Aid and the social sectors'. ReCom Position Paper. Helsinki: UNU-WIDER. http://www.recom.wider.unu.edu

UNU-WIDER (2014b). 'Aid, growth and employment'. ReCom Position Paper. Helsinki: UNU-WIDER. http://www.recom.wider.unu.edu

UNU-WIDER (2014c). 'Aid, Environment and climate change'. ReCom Position Paper. Helsinki:
UNU-WIDER. http://www.recom.wider.unu.edu.

UNU-WIDER (2014d). 'Aid, Governance and fragility'. ReCom Position Paper. Helsinki: UNU-WIDER. www.recom.wider.unu.edu.

van de Walle, N. (2012). 'Foreign aid in dangerous places: The donors and Mali's democracy'. WIDER Working Paper 2012/061. Helsinki: UNU-WIDER.

World Bank (2007). *World development report 2008: Agriculture for development*. Washington DC: World Bank.

World Bank (2008). *Aid architecture: An overview of the main trends in official development assistance flows*. Washington DC: World Bank.

World Bank (2012). 'Ethiopia - Additional financing for the third productive safety nets program (APL III) project'. Washington DC: World Bank.

World Bank (2013). *World development report 2008: Jobs*. Washington DC: World Bank.