

When Agglomeration Theory Meets Development Reality: Preliminary Lessons from Twenty World Bank Private Sector Projects

Alan Gelb, Gaiv Tata, Vijaya Ramachandran, and Ivan Rossignol

Abstract

The World Bank has currently committed \$1.5 billion to various projects that promote agglomeration benefits across firms, mostly in sub-Saharan Africa. Agglomeration benefits arise from the sharing of knowledge and ideas, the availability of a larger pool of labor, and from lower costs of production and transportation due to the clustering of firms. This paper reviews information from 20 World Bank agglomeration-focused projects such as special economic zones, growth poles, and industrial clusters. While many are at an early stage, it is possible to draw some tentative conclusions.

First, we find that project designs overestimate the intellectual clarity of the agglomeration approach. There have been many implementation challenges, resulting in unsatisfactory ratings for several projects. We argue that greater efforts should be made to reduce technical complexity (including the number of activities and institutions involved), to build institutional capacity, and to make projects flexible.

Looking forward, agglomeration projects may benefit from being designed as a series of incremental projects, by which lending can be carried out in stages to reflect changing realities on the ground.

Second, there are important second-order effects, including the impact of projects on asset prices, notably land which needs to be incorporated into assessing project outcomes. Agglomeration projects and local investment can have a large effect on land values, raising issues of ownership, control, and allocation.

Finally, while agglomeration may ease coordination failures and induce a critical mass of private firms to enter and invest, this does not always occur. Some threshold (in terms of lower costs and risk) may need to be reached to spur private investment. This threshold concept has not been incorporated into the current linear results framework (input to output to outcome); further experimentation is needed to develop flexible results frameworks that explicitly recognize this threshold effect.

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Contents

I. Introduction	1
II. Theoretical Foundations for Agglomeration Projects	1
Types of Agglomeration	2
Accelerating Agglomeration.....	3
Assessing Efforts to Accelerate Agglomeration	4
III. The World Bank's Portfolio of Agglomeration Projects	5
IV. Typical Features of Agglomeration Projects.....	7
V. Implementation Experience with Agglomeration Projects.....	10
VI. Conclusion.....	15
References.....	36

I. Introduction

Development projects and programs to support the formal business sector and create high-productivity jobs take a variety of forms. Some focus at micro-level, supporting individual businesses through providing finance and training to entrepreneurs. Others concentrate on macro level impediments to business, and aim to reduce economy-wide policy and regulatory constraints as well as, possibly, economy-wide infrastructure services. In between these macro and micro levels is a third group of projects that aims to create “agglomeration effects” to encourage investment in a given sector or location. These projects can include several approaches to boost the level of investment and its productivity: (a) improving location-specific or industry-specific infrastructure; (b) strengthening supply chain linkages through improvements in industrial organization (for example, linkages between large and small firms through aggregating smallholders or small and medium sized enterprises); and (c) improving skills within a particular industry by enhancing technology transfer along the supply chain.

This paper considers what appears to be an emerging trend towards this type of project support for formal business. It draws on a sample of World Bank projects with area and/or sector focus, including some that are often referred to as “growth pole” projects. Sub-Saharan Africa (Africa) appears to be a region of special focus for such projects, perhaps because of sparseness of African economies as well as the heightened attention to the need for structural transformation to underpin sustainable growth (ACET 2013). Section II briefly reviews the theoretical foundations for agglomeration-focused projects and Section III summarizes their typical components. Drawing on a selected sample of 20 projects, Section IV discusses some of the features of the World Bank’s portfolio for the period 1996 to 2014. Section V focuses on four cases with examples from Ghana, Afghanistan, Madagascar and Burkina Faso. Section VI concludes, with some possible lessons for this rapidly growing component of World Bank lending.

II. Theoretical Foundations for Agglomeration Projects

Agglomeration-focused projects draw upon several complementary and sometimes competing theories, so that the projects discussed in the next section emphasize different aspects of agglomeration and differ in their design. An early reference to agglomeration is Marshall (1920) who argued that the costs of moving goods, people, and also of sharing knowledge and ideas could be reduced by the agglomeration of firms. Marshall suggested that agglomeration-focused policy actions should focus on either a given sector or a given

geographical location (in which case agglomeration might span related sectors) or a combination of sector and location. Over the intervening century, a rich theoretical and applied literature has developed on agglomeration – this has been well summarized in the 2009 *World Development Report: Reshaping Economic Geography*.

Types of Agglomeration

What are the advantages of agglomeration? The 2009 *World Development Report* offers a useful classification of the different types of scale economies. According to the report, there are three broad categories: internal economies, localization economies and urbanization economies. The *internal economies* arise from larger plant sizes (better deals from suppliers, division of labor), *localization economies* arise from the clustering of firms in the same industry or in the same space (which increases the supply of information and the pool of specialized labor), and *urbanization economies* which arise from having a large number of industries in the same place. Hence, internal economies are firm specific (and are greater in heavy industries where plant sizes are larger). Localization benefits accrue within a given industry and urbanization benefits are typically realized across industries. The report provides several examples of economies of scale including being able to purchase intermediate inputs at volume discounts (internal), learning to operate a plant more efficiently over time (internal), a higher number of shoppers because of the clustering of businesses (local), more workers with industry-specific skills (local), observing and adapting ideas from others (urban), and larger markets leading to larger labor pools and vice versa (urban).

Another interesting classification is provided by Rodrigue (2013) who describes three basic categories—(1) *urbanization economies* which are about the benefits from having large numbers of people in the same place, including the availability of infrastructure and services, diversity of the labor market and size of the market (2) *industrialization economies* which include benefits derived from the agglomeration of industrial activity, usually manifested as industrial clusters and (3) *localization economies* where benefits are derived from being near a port, a power plant, a dam, a large university, or the seat of government.

Since the benefits from all three forms of agglomeration often accrue simultaneously, it is often challenging to understand their relative contributions. Hence, for example, Ellison, Glaser and Kerr (2007) look at co-agglomeration between pairs of industries in the U.S and find evidence to support each of Marshall's three theories of industrial agglomeration. Agglomeration saves transport costs because of proximity to suppliers or consumers; it

allows for labor market pooling; and it facilitates intellectual spillovers between firms with the last effect becoming more salient. However, Glaeser and Gottlieb (2009) find that clustering by manufacturing firms to reduce costs is no longer the force driving urban success in the U.S. Rather, cities are increasingly dependent on a high density of economic activity to play a role in speeding up the flow of ideas.

Accelerating Agglomeration

The benefits of agglomeration have led to approaches to accelerating agglomeration, primarily by having the state take on an active role in attempting to influence the pace and pattern of agglomeration. “Big push” theories (Rosenstein-Rodan, 1943, 1957) argue that economic underdevelopment is the outcome of coordination failure. Even the simplest activity requires a network of supporting services and markets that individual firms cannot organize. The state must therefore step in to encourage simultaneous coordinated investments in many sectors to produce self-sustaining industrialization. Big push theorists argue that a minimum market size is needed to induce firms to invest. If this is not possible in a poor, sparse economy with high transport costs, interventions should be focused on a well-defined area that could generate enough profits for investors. Big push investments can be categorized as generating “balanced growth” (spread across a wide range of industries) (Nurske, 1953; Fleming, 1955) or “unbalanced growth”, or as focused on some leading sectors with important backward and forward linkages (Perroux, 1950; Hirschman, 1958). These ideas served as the basis for the first “growth poles projects” in Europe, notably in France, and also underpin more recent efforts to maximize agglomeration benefits across firms. We will turn to a discussion of growth poles projects later in the paper.

These theories have had a substantial impact on policies and programs. The strong influence of unbalanced growth theory can be seen in Indian policies of the 1950s and 1960s and in several countries in Latin America in the 1970s and 1980s. Big Push theory has also been applied to rural economies, in the form of Integrated Rural Development Schemes. These appear to have achieved mixed results. A review for Africa carried out by the Department for International Development (UK) concluded that while the projects promised high returns “farm output did not increase as expected and economic rates of return were therefore substantially reduced. The objectives presented at appraisal were not achieved as planned”(DfID, 2004). Brazil’s Polo-Nordeste program may have been somewhat more successful but a detailed review concluded that the focus on commercial development meant that it reached only 3% of the targeted group of poor rural families. Factors noted as

impeding success included inadequate design, limited local ownership of programs, poor coordination between agencies, and land ownership and tenure issues that went unaddressed. Overall, the program proved less appealing to farmers than expected (Tendler, 1993).

While the intellectual pendulum may have swung away from an active state role to promote agglomeration with the neo-liberal resurgence of the 1990s, increased attention to economic geography and scale economies as a central determinant of development (Krugman 1991) led to a reappraisal of the theory as well as a reconsideration of the role of the government in encouraging industrial development (Lin 2012).

Agglomeration benefits have been sought in industries and spatial areas through a variety of modalities, including industrial zones, Special Economic Zones and other similar institutional arrangements with varying degrees of success. China probably has the best record; however, replication of the Chinese model in Sub-Saharan Africa and other developing countries has been challenging. A recent monograph by Thomas Farole provides a very useful overview of how special economic zones have fared in Sub-Saharan Africa (Farole 2011). Although most zones have been set up fairly recently, Farole reviews the available experience and points out that very little evidence exists for policymakers when deciding whether to set up a zone. Studying manufacturing-based zones across 10 countries, Farole finds that (i) defining and measuring the success of SEZs is not straightforward, (ii) most African SEZs are underperforming relative to those in Asia and Latin America, and (iii) there is a real risk that many African zones will “shift permanently and prematurely to a low-growth path.” Success of SEZs is closely linked to the competitiveness of the national economy (the investment climate matters!) and the unique natural resource base and “traditional” sources of competitiveness such as low wages and special preferences matter far less. Farole argues that similar to the Chinese experience, zones can play a catalytic role as part of wider regional initiatives such as growth poles projects and should be seen as catalysts for large-scale growth rather than as isolated enclaves.

Assessing Efforts to Accelerate Agglomeration

The literature summarized above suggests that addressing coordination failures has sometimes helped to accelerate the benefits of agglomeration (including by economizing on infrastructure or management capacity in contexts where these are scarce). However, the question remains as to why regulatory reforms and public investments have not always triggered changes in the perceived competitiveness of particular industries. There are two

measurement challenges. First, is the challenge of attributing increased investment to agglomeration-related activities as opposed to other activities that might encourage private investment. As noted in first chapter of the *World Development Report 2005: A Better Investment Climate for Everyone*, the volume and productivity of private investment is “influenced by costs, risks and barriers to competition that prevail in a given economy; these factors are affected by government policies and behaviors in addition to other factors such as geography, market size and consumer preferences.” Second, agglomeration benefits do not accrue in a linear fashion. We postulate that addressing a coordination failure is more likely to result in a positive outcome when, for example, the cost structure within a given sector or geographical location is close to a competitiveness threshold or where perceived risks as seen by a sufficiently large number of firms or a few large investors can be reduced.

To further explain this threshold effect, we provide two alternative scenarios. Figure 1 shows a distribution of firms in terms of their appetite for risk. Figure 2 shows that under very difficult conditions, only a few firms will enter the market. As risks and costs are reduced below the threshold, the entry of firms accelerates, increasing returns to reforms until only the most cautious firms have not entered. This model suggests that even if conditions are not perfect there is some threshold above which investment will accelerate, as the benefits of clustering are realized and firms are able to exploit location and labor pooling advantages as described by Glaeser et al.¹

III. The World Bank’s Portfolio of Agglomeration Projects

An initial set of 46 projects approved between 1998 and 2014 was identified through a keyword search of the World Bank’s Business Warehouse.² A second screening based on document review narrowed down the sample to 20 agglomeration-focused investment projects with a total commitment amount of \$1.5 billion.³ Table 1 shows that the majority

¹ Beyond the immediate benefits of solving the specific coordination failure are also those arising from the demonstration effect. If the coordination problem can be solved within the context of a special economic zone the policies implemented within the zone can be rolled out on a larger scale. The Chinese government, in particular, has often treated zones like laboratories to test policies that can later be replicated to generate investment by the private sector.

² Keywords included the following terms-- special economic zones (EPZs, industrial estates/parks, free zones, etc.), growth poles/resource corridors/linkage programs, value chain development, local economic development (city/ subnational strategies and/or market towns development), clusters, innovation systems, trade policy and integration, trade facilitation and logistics, and trade competitiveness..

³ IBRD or IDA projects classified as investment operations and excluding development policy operations or Trust Funded operations. The publicly available documents for each project include Project Appraisal

of these projects (17 out of 20) are located in Sub-Saharan Africa. The size of commitments varies from \$8.2 million for a project in Guinea-Bissau to \$250 million for one in Ethiopia, with an average of \$73 million. Project age varies considerably – two projects are closed, one has been under implementation for 9 (fiscal) years, two under implementation for 5 years, two under implementation for 4 years, two under implementation for 3 years, one under implementation for 2 years, four under implementation for 1 year and three under implementation for less than 1 year.

Agglomeration benefits accrue from within firm economies, within industry economies and from spatial economies where benefits accrue across industries (this is a broader definition of urbanization economies as benefits could potentially occur through clustering of, for example, agro processing firms in rural areas). All of the projects in our sample are expected to improve within firm economies for participating firms (or farms).

The projects can be divided into three groups. Twelve projects focus primarily on within industry economies as they specifically identify particular industries within which they plan to intervene: Burkina Faso Bagre Growth Pole, Brazil Ceara Regional Economic Development⁴, Cameroon Competitive Value Chains, Chad Value Chain Support, Ethiopia Sustainable Tourism Development, Gambia Growth and Competitiveness, Guatemala MSME Enterprise Productivity Project, Guinea Bissau Private Sector Rehabilitation and Agribusiness Development, Niger Competitiveness and Growth Support, Nigeria GEM, Senegal Casamance Development Pole⁵ and Senegal Sustainable and Inclusive Agribusiness Development. Five projects support the development and functioning of industrial zones where improving spatial economies is the primary objective and within industry economies are not identified: Ghana Gateway Project, Afghanistan PSD Project, Bangladesh PSD Support Project, Togo PSD Support Project and Ethiopia Competitiveness and Job Creation Project. Finally, three projects combine both within industry and spatial economies: DRC

Documents and Implementation Status Reports. In the case of the two completed projects, findings from the Project Completion Reports (which constitute self-assessments by task teams) were reviewed. For one of these projects the findings from the Project Performance Assessment Report (which constitutes an assessment by the IEG undertaken several years after project closing) were also incorporated.

⁴ This project also included a significant (over 50% of project costs) component focused on regional municipal infrastructure.

⁵ This project also has a significant component (> 15%) focused on DDR – Disarmament, Demobilization and Reintegration.

Western Growth Poles, Madagascar Growth Poles, and Mozambique Integrated Growth Poles.

IV. Typical Features of Agglomeration Projects

Most of the projects in our sample are in fairly early stages of implementation. This makes it impossible to measure outputs achieved, let alone outcomes or impacts. The focus of our analysis is therefore largely on design features and implementation challenges rather than results achieved.

Project Development Objectives (PDOs). Project development objectives drive project design including the results framework and the choice of project components. The PDOs (see Table 2) reveal that none of the projects refer to achieving the benefits of agglomeration as an end in itself – this is not surprising as agglomeration is a means to an end. Project development objectives tend to be the following: increasing growth or economic activity (7 references), inclusive development focusing on rural areas or MSMEs (7 references), increasing jobs and/or employment (6 references) and increasing productivity/competitiveness (5 references). There is generally a clear PDO focus on within industry economies or spatial economies or some combination of the two—for example, the DRC Western Growth Poles Project PDO is to “increase productivity and employment of selected value chains in target zones in the DRC.” However, we also find that at least five PDOs include references to more general objectives such as “improved investment climate/business environment.” Projects that address country level investment climate issues in addition to agglomeration require greater coordination efforts and are inherently more complex to implement as a result. We discuss this in detail in the next section.

The PDO outcome indicators parallel this focus: job creation (11 projects), increased revenues for project-related sectors or entities (14 projects), improvements in measures of productivity (6 projects) and increased investment levels (3 projects). Consistent with the improved investment climate objective, 5 projects refer to improvements in the cost and/or time of registering businesses and lowering other regulatory barriers. It should be noted that a common challenge to the achievement of agglomeration-focused PDOs and outcome indicators, whether increased productivity, outputs or jobs, is that these depend on the response of private entities. This makes it more challenging to assess the outcomes of projects, both in terms of accountability or attribution.

Project interventions to achieve PDOs. How many interventions are being undertaken within a given project? ⁶ The results of our review are shown in Table 3. Regarding agglomeration-focused interventions, we identify 46 across the 20 projects reviewed, slightly over 2 per project. Eleven interventions focus on industrial zones, 18 on agribusiness, 11 on tourism and 6 on other activities (including 2 on mining, 1 on footwear, 1 on ICT, 1 on entertainment and 1 on wholesale/retail trade). The particular activities of the agglomeration-focused interventions vary according to the constraints seen as being “binding”. These include efforts to improve infrastructure services, provide capacity-building support to public sector agencies and firms, strengthen public-private coordination and/or consultation mechanisms, and provide financial support to “first movers”.

Project-funded activities are sometimes coordinated with private sector investments by large anchor investors--for example, a resource company such as Rio Tinto in the case of the Madagascar Growth Poles Project. Such private involvement could also potentially boost local demand, increase returns to other activities, and help create a defined organizational structure for the project. However, the exact benefits expected to be provided by the private sector investments are difficult to assess based on the available documentation. Similarly, other donors sometimes provided complementary support to governments (for example, the Nigeria GEM project was complemented by substantial DfID activity). Benefits from these parallel projects are also difficult to assess based on available documentation.

In addition to agglomeration interventions and the five projects that include investment climate interventions, many projects also seek to strengthen firm level capacity through the provision of matching grants -- 8 include matching grant facilities (Table 3).⁷ The most complex project (in Madagascar) had 5 interventions – one macro level investment climate intervention, one micro level matching grant intervention and three separate meso-level “growth pole” agglomeration interventions.

Risks. Approaches to identify and mitigate risks to the achievement of PDOs have evolved over time so it is difficult to undertake a strict comparison across projects. However, 12 out of the total of 20 projects (including one at the time of restructuring) utilized the World

⁶ In general, project interventions are similar to project components. However, we separated out each sectoral/geographic intervention as a separate project intervention. For example, if two industrial zones were supported by a single project component, we identified this as two project interventions.

⁷ For an excellent analysis of the World Bank’s attempts to evaluate matching grants and its lack of success in doing so, see Campos et al (2012).

Bank Operational Risk Assessment Framework (ORAF, World Bank, 2010). Under the ORAF, projects are required to identify and rate the following risks and their associated mitigation measures: stakeholder risk, operating environment risk (including country and sector/multi-sector risk), implementing agency risk (including capacity and governance risk, with a fraud and corruption sub-category), project risk (including design risk, social and environmental risk, program and donor risk and delivery monitoring and sustainability risk) and other risks. Based on this detailed assessment (which is included as a separate annex in each Project Appraisal Document), overall risk ratings of Low, Moderate, Substantial or High are assigned to each project. All of the projects were assigned an overall risk profile of either Substantial or High Risk.

Design risk is an area of particular interest. This is risk associated with technical complexity, complex scope, coverage or implementation arrangements, and lack of design flexibility. An internal review of the World Bank Africa Region's Financial and Private Sector Development portfolio undertaken in 2012 revealed that simpler projects performed better - a strong inverse correlation was found between the number of project components and achievement of the project's development objectives (World Bank, 2012). Since many of the agglomeration-focused projects had multiple components dealing simultaneously with challenges at the macro, micro and meso/sector level we reviewed the *self-assessment* of teams with regard to design risks (see Table 5). Very few project teams self-identified technical complexity as a challenge – those that did noted difficulties that client governments and the private sector were likely to face in implementing new agglomeration approaches. Several projects did self-identify challenges with scope/coverage complexity and implementation/institutional complexity but the mitigation measures identified were rarely to reduce complexity.⁸ Mitigation mainly focused on strengthening implementation capacity through the provision of project management, procurement and financial management skills. A few projects identified design flexibility challenges but these were largely in matching grant schemes, to ensure that large firms did not disproportionately capture available resources.

Given that several projects were focused on more than one geographical area or industry and further given that different project activities were unlikely to have been at the same level of readiness for implementation, we find it striking that none of the project teams chose to

⁸ One project referred to reducing the number of value chains supported from 5 to 2 during the design phase and another referred to coordinating with other Bank/IFC and donor interventions on investment climate reforms in order to exclude these from the project.

design the interventions as a series of projects each focused on a particular intervention (or projects which would have been classified as Adaptable Program Loan until FY2012). World Bank data ⁹ shows that between FY2006-FY2012 between 8 to 12% (or between 21 to 36 projects) annually were prepared as Adaptable Program Loans. Several reasons could have contributed to selecting a single large loan relative to a series of small loans but one critical one that could have contributed significantly was the need for initial operations to identify triggers for subsequent phases. As noted in the World Bank's 2012 Investment Lending Reform document 'in a rapidly changing world, the use of triggers for later operations has proven unwieldy' and consequently this requirement was dropped as part of the reform.

V. Implementation Experience with Agglomeration Projects

We first look at implementation experience across the portfolio. Second, we review evaluation reports for the two closed projects: the Ghana Gateway and the Afghanistan PSD projects. Third, we highlight the experience with two of the older projects – one close to completion and the other mid-way through its project life cycle.

Overall portfolio patterns. Projects at early stages of implementation are less likely to have ratings showing that development objectives may not be met or that implementation progress is unsatisfactory. It is therefore hard to reach conclusions on the 8 projects approved during or after FY2012. However, it is striking that eleven of the twelve projects approved prior to FY2012 were rated unsatisfactory at some point during their implementation and that five of these were formally restructured during implementation. While the teams working on the projects should be commended for addressing problems the pattern shows a high number of unsatisfactory ratings. These ratings are for projects still under implementation so that there is still time for improvement (as well as for deterioration) and one cannot compare them with the overall level of satisfactory achievement of development outcomes by World Bank projects as assessed at project closing. These stood at 71.2% in FY13 with a target of 75% (per the World Bank's October 2014 corporate scorecard). Nevertheless, the data presented in Table 4 suggest that the

⁹ World Bank (2012). Investment Lending Reform: Modernizing and Consolidating Operational Policies and Procedures. See Table 1.

agglomeration project portfolio requires close monitoring throughout the period of implementation.

Evaluation of completed projects. We review three projects that have reached (or almost reached) completion and one project mid-way through its implementation. The first two projects involved industrial parks, the second two growth poles.

Ghana Trade and Investment Gateway Project. The project was approved on July 9, 1998, formally restructured in 2005, and closed on December 31, 2009, four years after its planned closing date. The final project cost was \$56.8 million, of which \$52.4 million was financed by IDA. The revised/final objectives of the project were to attract a critical mass of export-oriented firms, to facilitate trade through the improvement of quality and standards of services delivered to investors and to exporters by institutions and agencies responsible for trade and investment, and to develop a multi-purpose industrial park. The first component focused on investment promotion and removal of administrative bottlenecks and involved support to various organizations such as the Customs, Excise and Preventive Service, Ghana Immigration Service, Ghana Ports and Harbours Authority, Ghana Investment Promotion Centre, and Ghana Free Zones Board. The second component involved infrastructure investments associated with the development of an industrial park. Initially reserved for export-oriented companies, after project restructuring, the site became a multi-purpose industrial park for all types of companies. The project helped finance infrastructure both around the site (for example improvements to the port of Tema) and on the site itself.

The Project Performance Assessment Report issued by the World Bank Group's Independent Evaluation Group (four years after the project closed, in December 2013) rated the project outcome as moderately satisfactory. Achievement of development objectives was rated as substantial though the project's contribution to the objective of accelerating economic growth was considered to be at best, modest. This rating reflects both the achievements under the institutional development component as well as the delays in implementing the industrial park component and the long process to restructure the project. Bank performance was rated moderately unsatisfactory based on the mixed quality at entry and the quality of supervision. The design of the institutional component was considered as being of good quality but the design of the free zone enclave component was considered deficient. Borrower performance was rated as moderately satisfactory.

Afghanistan Private Sector Development Support Project. The project was approved on February 22, 2007 and closed on June 30, 2011 (the original closing date). Out of the IDA grant of \$25 million, \$12.2 million was disbursed. The objective of the project was to increase the volume of private investment and productive jobs in Afghanistan. The project had two components. The first was to develop an industrial park (USD 24.0 million) with the government providing the land, and the project financing infrastructure as well as related institutional development for industrial park development. The second component focused on broader institutional development for private sector development by helping two key government entities with the investment promotion, policy formulation, implementation and evaluation.

The Implementation Completion and Results Report (which was published in March 2012) rated the project outcome as unsatisfactory with both Bank and borrower performance rated as Moderately Unsatisfactory. The industrial park -- near the city of Jalalabad, a major business center and trade route in the eastern part of Afghanistan - never became operational during the life of the project. Factors that led to delays and cost overruns included technical design issues in connection with the construction of the park, deterioration of the security situation, lack of power supply for the Park, overall implementation capacity issues (especially with procurement) and safeguards. Since the performance indicators for the main component were tied to an operating industrial park (e.g. jobs created, investments realized), the project development objectives were not achieved though there were improvements in the time and cost of starting a business.

The agglomeration-related component of both projects consisted of building industrial parks. In the case of Ghana, insufficient demand (in the original design) materialized both from restricting access to the park only to export-oriented firms and issues with the original park manager being unable to attract clients. Once these were addressed, the park became operational. In the Afghanistan project, lack of power was a major issue with the original project design. Generators were too costly and alternative approaches such as a connection to the public grid were not implemented. Part of the challenge in adapting the design arose from the limited expertise of the local implementing agency. Both evaluations point to the benefits of titled land that becomes available as part of the development of industrial parks. The Afghanistan evaluation notes the over-sizing of the park as being motivated by land

titling concerns¹⁰ and the Ghana evaluation notes that interviewees referred to land tenure security as a possible benefit of a plot provided by a government agency.¹¹

The two other projects focus on growth poles.

Madagascar Growth Poles Project.¹² The Madagascar Growth Poles project has just closed. The original financing of \$129.8 million was approved on July 12, 2005 with an original closing date of December 2010, which was extended until October 31, 2012. Additional financing of \$40 million was approved on May 8, 2008 and the project closed on December 31, 2012. This additional financing and the overall project were substantially restructured in November 2012, with changes to the Project Development Objectives, the dropping of a project component, and the extension of the closing date to December 31, 2014.

The project focused on three poles, one in the North (tourism), one in the South (infrastructure anchored by a large mining investor, Rio Tinto) and one in the Center (improving the performance of the textile-garment export complex), as well as on some over-arching policy reforms. The three project components address many of the constraints typically considered in growth poles projects, including infrastructure, regulation, access to finance and capacity-building, with different emphases in each sub-region. Figure 3 shows the location of the three poles.

Implementation was adversely affected by country circumstances, notably a coup which eventually resulted in restrictions on World Bank disbursements. Key activities under the project were affected and for several months, the World Bank was not able to disburse any money towards this project. Madagascar's eligibility under AGOA was removed in 2009, which undermined the Central region component based on the garment industry. During the project restructuring of 2012, this component was eventually dropped "due to a lack of private sector response and difficulty in establishing clear implementation arrangements."

Tourism activities under the other two components were also affected by the political upheaval. The other components have also faced some difficulties, including from an unresponsive power generating company in the North and corruption in land registries.

¹⁰ Paragraph 6.3 of the Implementation Completion Report (World Bank, 2012)

¹¹ Paragraph 4.9 of the Project Performance Assessment Report (World Bank, 2013)

¹² Our reviews for this and the following project are based on project documentation including the original project appraisal documents, project restructuring documents (where appropriate) and the latest Implementation Status Reports

Nevertheless, the indicators assessing achievement of the Project Development Objective (as shown in the ISR of June 30, 2014) show that most targets have been achieved or exceeded including for the number of registered businesses, the number of formal jobs created and the number of direct project beneficiaries (including proportion of female beneficiaries). At least part of this is due to significant capacity on the ground including the local head of project. At the same time, the costs per direct job are rather high; if all of the new jobs measured to date in the two areas are attributed to the project the average cost is about \$13,000 per position.¹³ However, there may be job creation in the long term, which will reduce the average cost per job.

Burkina Faso Growth Poles Project. The Bagre Growth Pole project is about half way through implementation. Commitment of \$115 million was approved on June 21, 2011 and the project closing date is set for September 30, 2017. The project aims to accelerate the creation of a development zone initiated in 1989, and builds on government investment of \$200 million, including for the construction of the Bagre dam. Since the start of the project the government has invested another \$70 million through a bond issue and the African Development Bank is expected to invest an additional \$30 million.

The Project Development Objective (PDO) states that the goal of the project is to raise the level of economic activity in the Bagre Project Area, resulting in an increase in private investment, employment generation, and agricultural production. Consequently, the PDO indicators focus on the value of investment flows, the number of jobs created and the number of direct project beneficiaries, including the proportion of female beneficiaries. The key components of the project are (i) improving institutional capacity for zone management and strengthening the investment climate (ii) developing critical infrastructure including for irrigation, livestock management, fisheries, market and social infrastructure, roads and power supply and (iii) development of critical services and direct support to smallholders and SMEs through matching grants.

Project documents recognize the likely implementation challenges noting that the “short time for project preparation time and limited capacity and knowledge of the Government Preparation Committee on the Growth Pole approach and special economic zone may negatively impact the quality of the Project design and further lead to slow implementation

¹³ For comparison, World Bank enterprise surveys of formal industry indicate that the median capital/labor ratio averaged across 12 Sub-Saharan African countries is a little over \$3000 (Gelb, Ramachandran and Mayer 2013).

of activities at Project start.” The implementation status of this project was rated for some time as unsatisfactory until the Implementation Status Report of June 2014 noted progress, Implementation Progress ratings then improved to Moderately Satisfactory. The key change relates to the issuance of a \$44 million contract for the building of irrigation infrastructure on 2582 hectares, and associated activities (e.g. resettlement of affected households and environmental safeguard measures). It is unclear how the recent political turmoil in the country will affect project implementation going forward.

Bagre illustrates the potential impact of agglomeration projects on the demand for land and its value, and the importance of transparent methods of allocation. The government has made progress in the selection of small, medium and large investors who had expressed interest in leasing 11,000 hectares or 40 square miles of land. However the ISR noted that it still needed to make publicly available the criteria used in selecting the winning proposals. It is not surprising that demand for land, as expressed in investor submissions, far outstripped supply. If the total post-dam investment were allocated across the entire 40 square mile scope of the project, the average investment per acre would be about \$6,000, comparable to the average value of cropland in the US.¹⁴

VI. Conclusion

The World Bank has currently committed \$1.5 billion dollars to various agglomeration-focused projects, mostly in sub-Saharan Africa. This portfolio forms an important part of its efforts to boost growth and is still in the early stage of development. However, even at this stage, some design and implementation lessons emerge.

First, understand investor behavior. Economic theory suggests that agglomeration might ease coordination failures in particular sectors or geographic locations and that policy/regulatory changes and public investments can induce a critical mass of private firms to enter and invest. This will only happen, however, if costs and risks can be brought down to below the threshold needed to spur private entry. If firms are very far from the investment threshold there will be a limited supply response to the government’s actions. On the other hand, if the government takes actions to encourage private investment that might have occurred anyway this will result in unnecessarily subsidizing the private sector. It

¹⁴ The average value of cropland in the US (irrigated and non-irrigated) is around \$4,000. http://www.nass.usda.gov/Publications/Highlights/2013_LandValues_CashRents/index.asp For irrigated cropland, the highest average value by state in 2014 was for California, at \$12,100 but most states registered far lower values http://www.nass.usda.gov/Publications/Todays_Reports/reports/land0814.pdf

is challenging to operationalize this threshold concept within the linear ‘input to output to outcome’ logframes currently used to frame project development objectives. The role of the private sector and the incentives facing private actors need to be more clearly brought out in the theory of change and the private sector needs to be consulted on the potential ‘distance from the threshold’ in order to properly design the project. Furthermore, results frameworks need to recognize the uncertainty associated with private firms’ behavior and the probably discontinuous nature of the payoffs around the threshold.¹⁵

Second, streamline projects. Current project designs over-estimate the intellectual clarity of the agglomeration approach. Some projects focus on more than one geographical location and/or include macro/investment climate and micro/firm matching grant components as well as agglomeration measures. A high share of projects has received unsatisfactory ratings, whether intermediate or final. Given the challenging implementation experience thus far, greater thought might be given upfront to reducing technical complexity (including the number of activities and institutions involved), as well as to institution building and to flexibility in project design. One approach which should be given serious consideration is to design agglomeration projects as a series of projects rather than as a single project covering several macro, meso and micro interventions.

Third, strengthen mechanisms to deal with complexity. Even streamlined agglomeration projects will involve a range of players and interests. Especially in countries without very strong central direction of economic and development policy, projects need to include mechanisms to ensure a common interest in the project and to sustain pressure to move forward through the inevitable hiccups in implementation that will accompany even well-conceived projects. This requires involving all key players from the start (whether central or local governments or utility and other service providers), understanding the incentives and constraints that they face. The monitoring and evaluation framework for the project becomes particularly important, as it needs to provide accurate and timely reports that monitor progress and reasons for delays.

Fourth, take important second-order effects into account. Agglomeration projects will often have an impact on the value of land as well as land tenure security. This can arise from

¹⁵ Beyond this conceptual challenge, there are also the well-known measurement challenges of estimating job creation (gross vs. net), attributing increased investment levels to policy changes, etc.

large purchases of land for industrial parks (Ghana and Afghanistan) or large investments in irrigation (Burkina Faso) or infrastructure that facilitates tourism and other commercial activities (Madagascar). Successful agglomeration will further contribute to a land price spiral as more investors are pulled into the expanding local market. Initial conditions matter – who owns or controls the land? So do allocation processes – how is land to be exchanged or acquired in the course of the project? These are much issues of political economy as of technical design. This aspect is least addressed in project results frameworks – in part because it is difficult to model and in part because it is outside the direct results achieved through the project.

This is only a preliminary analysis of the World Bank’s agglomeration-focused projects. As implementation of the cohort of projects approved in the last three fiscal years advances, our findings will need to be revalidated or changed based on this larger sample of projects. In the meantime, we hope that our findings will be useful for the next generation of agglomeration-focused projects, currently under preparation.

Figure 1: The Appetite for Risk across Firms

Firms share many features but are not identical

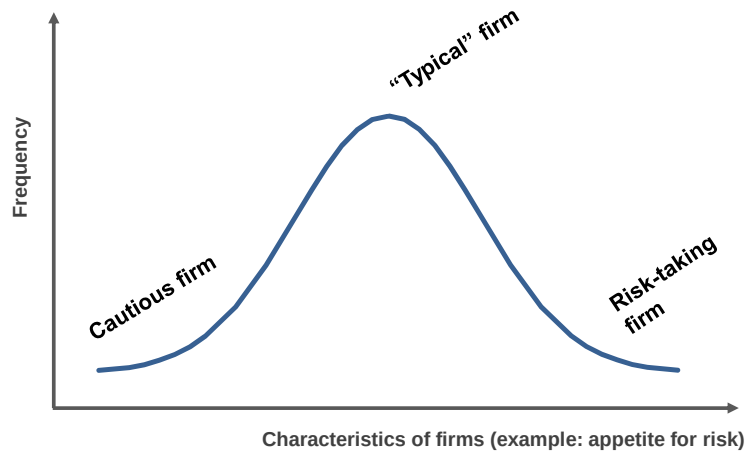


Figure 2: The Decision to Invest or Enter

The decision to invest or enter

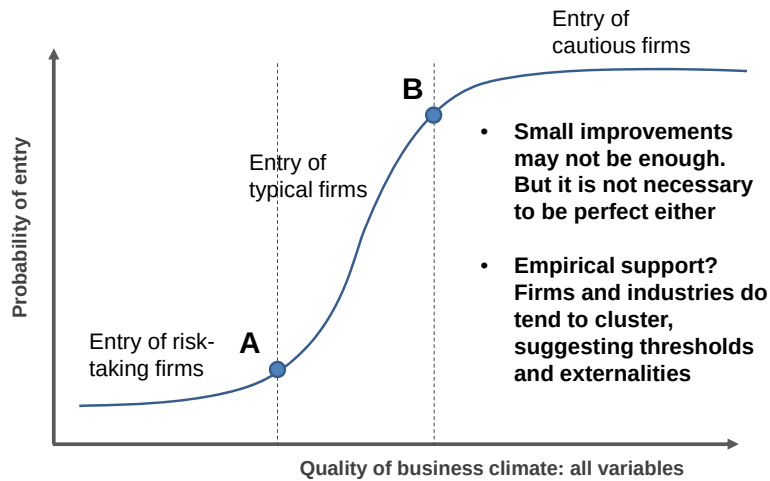
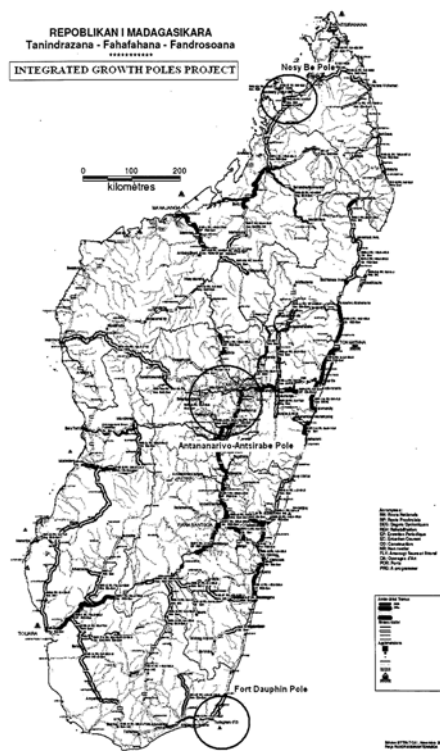


Figure 3: The Original Three Growth Poles in Madagascar



Source: World Bank

Table 1: World Bank Agglomeration-Focused Projects

World Bank Project ID	Region	Country	Project Name	FY Approved	IBRD/IDA (\$ Million)
P000970 a/	SSA	Ghana	Trade Gateway & Investment	1998	51
P083351 b/	SSA	Madagascar	Integrated Growth Poles	2005	170
P090928 c/	SAR	Afghanistan	PSD Support	2007	25
P098132	SSA	Ethiopia	Tourism Development	2009	35
P099369	LAC	Brazil	Ceara Regional Economic Development	2009	46
P112975	SSA	Cameroon	Competitive Value Chains	2010	30
P114240	SSA	The Gambia	Growth & Competitiveness	2010	12
P103499	SSA	Nigeria	Growth & Employment	2011	160
P112011	LAC	Guatemala	Enhancing MSME Productivity	2011	32
P119662	SSA	Burkina Faso	Bagre Growth Pole	2011	115
P120843	SAR	Bangladesh	Private Sector Development	2011	120
P122326	SSA	Togo	Private Sector Development Support	2011	13
P127204	SSA	Niger	Competitiveness & Growth Support	2012	50
P124018	SSA	Senegal	Sustainable And Inclusive Agribusiness Development	2013	80
P124720	SSA	DRC	Western Growth Poles	2013	110
P125506	SSA	Senegal	Casamance Development Pole	2013	40
P127303	SSA	Mozambique	Integrated Growth Poles	2013	100
P133021	SSA	Chad	Value Chain Support	2014	10
P143302	SSA	Ethiopia	Competitiveness And Job Creation	2014	250
P127209	SSA	Guinea Bissau	Private Sector Rehabilitation and Agribusiness Development	2014	8
			Total		1457

Source: World Bank

Notes: IDA projects amounts are specified in Special Drawing Rights. US Dollar equivalents are based on the exchange rates at time of project approval as estimated in project appraisal documents.

a/ Closed project. Actual expenditures of \$52.5 million compared to originally approved amount of \$50.7 million

b/ Includes additional financing of \$40 million approved in FY2008 (P110405).

c/ Closed project. Actual expenditures of \$12.2 million compared to originally approved amount of \$25 million.

Table 2: Project Development Objectives of World Bank Agglomeration-Focused Projects

Country	Project Name	Project Development Objectives	End of Project Outcome Indicators
Ghana	Trade Gateway & Investment	Development of a multi-purpose industrial park and improvement of the quality and standards of services delivered to investors and to exporters by the Borrower's institutions and agencies responsible for trade and investment, aiming to attract a critical mass of export-oriented firms and facilitate trade in the territory of the Borrower for accelerated growth.	10 firms have been established and are operating in the second year after completion of civil works; 20 by end-third year; and 30 by end of the fourth year. Net export revenues have increased by 25% in second year; by 30% in third year; and by 40% in fourth year after completion of the civil works.
Madagascar	Integrated Growth Poles (revised per project restructuring)	Assist GOM to provide an adequate business environment to stimulate and lead economic growth in three regional poles in the areas of Antananarivo-Antsirabe, Nosy Be and Taolagnaro.	Annual Private investment flows increase from \$84 million to \$1.5 billion Number of new enterprises registered in the three regional poles increase from 2185 to 3200 Number of new jobs created in the three poles from 3265 to 16500 EDBM is fully staffed and operational Adoption and implementation of regional development plans Adoption by Parliament of new investment law and amended free zone law
Afghanistan	PSD Support	Assist the Recipient in improving its investment climate for foreign and domestic investors	Increased amount of investment (\$25 million) and job creation (3500 jobs) in the industrial park supported by the project. Decreased amount of time taken (reduction to 30 days from benchmark TBD) and decreased cost (40% from benchmark TBD) incurred to open a business. More positive private sector view (from TBD to 85%) on policy predictability as captured through enterprise surveys.
Ethiopia	Tourism Development	Enhance the quality and variety of tourism products and services in targeted destinations so as to increase the volume of tourism, foreign exchange earnings and jobs.	Average percentage increase in the number of international tourist arrivals in targeted destinations (62% total increase from 300k baseline) Average expenditure by tourists in targeted destinations (57% total increase from \$803 baseline) 400 new tourism-related jobs created in targeted destinations

Brazil	Ceara Regional Economic Development	Promote economic development, improve urban infrastructure and enhance regional management capacity in the Central Cariri Region of Ceara.	30% reduction of average morning peak hour travel time between defined action points in central Juazeiro (by 15%); 85% of generated family solid waste disposed properly in the regional sanitary landfill (up to 85%); 11% increase (from baseline of 70 million pairs in annual production of footwear (pairs) produced in the Cariri region; 20% increase from baseline of 360k in number of tourists that visit Cariri Central per year; Operationalization of a Regional management model for the Central Cariri
Cameroon	Competitive Value Chains (revised per project restructuring)	Contribute to the growth of the wood transformation and tourism industries	Number of artisans and formal workers in the wood value chain increase from 40k to 50k Value of wood products benefiting from second and third stage processing increases from US\$1mm to US\$7 mm Number of international visitors in Cameroon increases from 487k to 630k
The Gambia	Growth & Competitiveness	Improve the investment climate and strengthen the competitiveness of key sectors of the Gambian economy	Cost of registering a business reduced from 215.1 percent to less than 140 percent of GNI per capita Increase in total incremental sales of horticulture products by 15 percent by end of project Number of tourism arrivals from non-traditional markets increased by 10 percent by end of project
Nigeria	Growth & Employment (revised per project restructuring)	Increase firm growth and employment in participating firms in Nigeria.	Employment growth and growth of participating firms within target clusters 20% Growth in Sales of participating firms from baseline of \$15614 10% increase in value added per worker of participating firms from baseline of \$2339 20% increase in average no. of workers in participating firms from baseline of 5 workers
Guatemala	Enhancing MSME Productivity	Stimulate the growth of micro, small and medium enterprises in selected value chains (in agribusiness and tourism).	% value increase per unit in respective value chains from TBD baseline Number of MSMEs participating in value chain working groups (target and baseline TBD)
Burkina Faso	Bagre Growth Pole	Contribute to increased economic activity in the project area, resulting in an increase in private investment, employment generation and agricultural production.	20,000 direct project beneficiaries (of which 30 percent are women) \$20 million of investment flows 30,000 jobs created (including indirect beneficiaries) Increased volume of production in project area (from 157k tons to 450k tons of horticulture production, from 600 to 1250 tons of fish production and from 300 to 2400 tons of animal food)

Bangladesh	Private Sector Development	Facilitate investment in growth centers in the emerging manufacturing and services sectors of the economy with the aim of generating employment.	Investment: Increase direct private investment in the creation of new zones by \$45 mm Increase private firm level investment in new zones by \$15 mm Increase number of firms in new zones by 40 Increase non-Ready Made Garments investment in new zones by 70% Employment: Increase direct employment in new zones by 4,600 (50% female) Increase indirect employment through firms supplying to the new zones by 3 (50% female)
Togo	Private Sector Development Support	Contribute to an improved investment climate in Togo, including in a New Free Zone, as well as to an improved performance of targeted micro and small businesses.	Number of days required to create an enterprise has been reduced from 75 to 5. Performance of MSEs supported by project improved compared to firms in control group by 30% (as measured by increased turnover) A PPP legal regulatory and institutional framework applicable to the Free Zone and Special Economic Zones is established
Niger	Competitiveness & Growth Support	Improve selected aspects of Niger's business environment, support the development of the meat industry and increase local business participation in the extractive industry sector.	Reduced time to trade across borders: Clearance of imported goods from baseline of 64 to 38 Clearance of exported goods from baseline of 59 days to 35 Reduction of time to create a business from 17 to 4. Improvement of turnover of SMEs supported by matching grant by 12% Increase volume of meat processed and sold in slaughterhouses from baseline of 44 to 84 tons/day Proportion of local procurement achieved in Extractive Industries increases from zero baseline to 10% 5000 direct project beneficiaries (20% female)
Senegal	Sustainable And Inclusive Agribusiness Development	Develop inclusive commercial agriculture and sustainable land management in project areas	Annual value of commercial agriculture in project areas increases from zero baseline to 100k tonnes and US\$120 mm 9500 jobs created in project areas of which 6600 women and 6600 hired by large investors 10,000 hectares with sustainable land management practices adopted
DRC	Western Growth Poles	Increase productivity and employment of selected value chains in target zones in the DRC	11,000 jobs created in select value chains (50% female) 50,000 direct beneficiaries of the project (Project Development Funds, enterprises in SEZ, farmers, agro-industrial firms) (40% female) Increased productivity of food crops in select value chains (cassava from baseline of 8 to 20 ton/ha, rice from 1.8 to 3.0 ton/ha and palm oil from 3 to 15 ton/ha)

Senegal	Casamance Development Pole	Enhance agricultural productivity of youth and female farmers for selected crops and improve transport linkages in isolated rural communities in targeted areas of the Casamance region	Increase in rain-fed rice yield by 1.6 tons/ha Increase in average revenue per hectare of horticulture from 250k baseline to 675k CFA francs. 25,000 tons of local products passing through the Bignona platform per annum Increase in share of rural population with access to an all-season road in Casamance region from baseline of 52% to 60% 50,000 project beneficiaries of which 40% women and 50% youth
Mozambique	Integrated Growth Poles	Improve the performance of enterprises and smallholders in the Zambezi Valley and Nacala Corridor focusing on identified high growth potential zones (growth poles).	140,000 project beneficiaries (35% female) 3,500 persons with wage employment of at least half-time/week in targeted zones (20% female) 30% average increase in agricultural output sold per smallholder farm into formal partnership with IDCF recipients from baseline TBD 20 percent in smallholders in targeted zones selling crops to medium or large commercial enterprise from baseline TBD
Chad	Value Chain Support	Improve (i) targeted aspects of the business environment; and (ii) performance of agropastoral value chains in the Republic of Chad.	Time to create a business in reduced to 29.7 days (Sub-Saharan average) from baseline of 62 days. 23,542 tons of meat processed in slaughterhouses/areas in target zones up from baseline of 18,542 tons 543 direct project beneficiaries (20% female) Time to export reduced to 57 days (the level of other SSA countries e.g. Niger) from baseline of 73 days US\$1.45 mm contribution of the private sector through matching grant scheme
Ethiopia	Competitiveness And Job Creation	Contribute to job creation by attracting investments and improving competitiveness of enterprises in the targeted industrial zones and their linked domestic enterprises	32,000 jobs created by activities linked to the supported Industrial Zones including: 1200 jobs created by local suppliers supported by linkage fund 30,000 jobs created in firms operating in IZs US\$280 mm total sale value of goods and services linked to the supported IZs including: US \$274 mm from firms operating in IZs and US\$4 mm from local suppliers supported by linkage fund 22000 direct project beneficiaries (60% female) 50 trained trainers
Guinea Bissau	Private Sector Rehabilitation and Agribusiness Development	Support inclusive development of the cashew agribusiness sector and promote entrepreneurship in other sectors of the economy	10% better farm-gate price of cashew farmers supported by project relative price of similar farmers identified at beginning of project (control group) 250 jobs (165 female) created by cashew agro-processing units directly supported by project 30 % of firms (supported by the Business Plan Competition) in operation relative to control group

Note: The PDOs and Project Outcome Indicators are summarized or repeated verbatim directly from project documents. These are not interpretations of the authors.

Table 3: Design Characteristics of World Bank Agglomeration Oriented Projects

Country	Project Name	Focus and number of interventions				Cross-cutting reforms financed (Y/N)	Matching grants (Y/N)	Comments
		Ind. Zone	Agr. Zone	Tourism	Other			
Ghana	Trade Gateway & Investment	1				Y (\$13.4 million)		
Madagascar	Integrated Growth Poles	1		2	1 (mining)	Y (\$21 million)		
Afghanistan	PSD Support	1				Y (\$1 million)		
Ethiopia	Tourism Development			3			Y/\$3 million	
Brazil	Ceara Regional Economic Development			1	1 (footwear)			
Cameroon	Competitive Value Chains		1	1			Y/\$4.5 million	
The Gambia	Growth & Competitiveness		2	1			Y/\$8 million	
Nigeria	Growth & Employment			1	3 (ICT, entertain wholesale/retail)			Cross-cutting reforms and two clusters (construction and meat/leather co-financed by DfID)
Guatemala	Enhancing MSME Productivity		2	2				
Burkina Faso	Bagre Growth Pole		1				Y/\$12.5 million	
Bangladesh	Private Sector Development	3						

Country	Project Name	Focus and number of interventions				Cross-cutting reforms financed (Y/N)	Matching grants (Y/N)	Comments
		Ind. Zone	Agr. Zone	Tourism	Other			
Togo	Private Sector Development Support Project	1				Y(\$3 million)	Y/\$1.75 million	
Niger	Competitiveness & Growth Support		1		1 (mining)			
Senegal	Sustainable And Inclusive Agbiz Dev. Agribusiness Project		1				Y/\$4 million	
Dem Rep of Congo	Western Growth Poles	1	3					
Senegal	Casamance Development Pole Project		3					
Mozambique	Integrated Growth Poles Project	1	1					
Chad	Value Chain Support Project		2			Y (\$2 million)		
Ethiopia	Competitiveness And Job Creation	2					Y/\$15 million	
Guinea Bissau	Private Sector Rehabilitation and Agribusiness Development		1				Y/\$1.2 million	

Source: World Bank

Table 4: Project Implementation Issues for World Bank Agglomeration-Focused Projects

Country	Project Name	FY Approved	Project Restructuring	Unsatisfactory DO/IP Ratings
Ghana	Trade Gateway & Investment	1998	Y	Y
Madagascar	Integrated Growth Poles	2005	Y	Y
Afghanistan	PSD Support	2007		Y
Ethiopia	Tourism Development	2009	Y	Y
Brazil	Ceara Regional Economic Development	2009		Y
Cameroon	Competitive Value Chains	2010	Y	Y
The Gambia	Growth & Competitiveness	2010		
Nigeria	Growth & Employment	2011	Y	Y
Guatemala	Enhancing MSME Productivity	2011		Y
Burkina Faso	Bagre Growth Pole	2011		Y
Bangladesh	Private Sector Development	2011		Y
Togo	Private Sector Development Support	2011		Y
Niger	Competitiveness & Growth Support	2012		
Senegal	Sustainable And Inclusive Agribusiness Development	2013		
DRC	Western Growth Poles	2013		
Senegal	Casamance Development Pole	2013		
Mozambique	Integrated Growth Poles	2013		
Chad	Value Chain Support	2014		
Ethiopia	Competitiveness And Job Creation	2014		
Guinea Bissau	Private Sector Rehabilitation and Agribusiness Development	2014		

Table 5: Project Design Risks Identified in Operational Risk Assessment Framework for Selected Projects

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
Cameroon	Competitive Value Chains (restructured)	Substantial		Yes	Yes		Project design may be too complex to be effectively implemented.	Project Coordination Unit has recruited a team of dedicated experts in areas in which the project operates (tourism and wood transformation), as well as procurement and financial management specialists. In addition, the restructuring allows to bring more focus in the activities being implemented by dropping some activities and studies, which are unlikely to generate impact in the short term.
Guatemala	Enhancing MSME Productivity	High			Yes	Yes	Risk of elite capture in the value chains. Contracting with value chain working groups will require a legal transformation of some of the unassociated, unregistered firms. While larger firms (including anchor firms, transport companies and input providers) are necessary for improving efficiency and productivity throughout the value chain, they cannot be permitted to dominate the organization and action plans (sub-projects) development of the value chain working groups.	Legal options are being investigated by MINECO and will be shared as part of initial orientation to the selected value chain working groups. The proposed value chain must have a large share of micro, small and medium enterprises active in the sector (such as is the case in tourism and agribusiness). Proposed sub-projects must be able to demonstrate the scale of likely employment generation. The Steering Committee led by MINECO will include representatives of civil society that have some commercial background.
Burkina Faso	Bagre Growth Pole	Medium-I	Yes		Yes	Yes	Short time for Project preparation time and limited capacity and knowledge of the Government Preparation	Accumulated knowledge on the country context, detailed studies from ongoing World Bank and other donor-financed operation and firms hired under the PPA

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
							Committee on the growth Pole approach and special economic zone may negatively impact the quality of the Project design and further lead to slow implementation of activities at Project start. Institutional readiness risks reforms (namely the transformation and restructuring of MOB into a new authority during Project implementation) may slow down implementation of Project activities.	helped design the Project. Also, the Project is designed so that implementation will be adjusted as more specific information from studies currently underway emerges. The implementation plan will be adjusted as necessary. A realistic disbursement plan has been prepared during appraisal. Part of Project activities, notably Component II (Critical infrastructure, 60 percent of the proposed Financing) will initially be implemented by the MOB strengthened with qualified staff and internationally recruited engineering and agribusiness consulting firms, which will assist in developing and implement the growth Pole management model, and will help restructure and strengthen the MOB. Component III (Critical services, 11 percent) will be implemented by MEBF which already has a sound track record in managing similar activities under another IDA-funded Project (Cr. 3733 BUR).
Togo	Private Sector Development Support	Medium-I	Yes		Yes		A badly designed project would not yield to any real results (for example, many studies could be financed, but with no impact). Weak implementation capacity (including Financial Management and Procurement) and lack of availability of focal points	There were questions on the design of the component targeting on the Free Zone, but these questions were addressed during the pre-appraisal mission. There is now a consensus on this component. The component focusing on entrepreneurship is relatively complex and has benefited from a thorough analysis. The component on investment climate reforms has been kept focused and narrow to ensure targeted results. PIM to be developed and to clearly set the roles and responsibilities of the

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
								various stakeholders with appropriate trainings.
Niger	Competitiveness & Growth Support	Substantial		Yes			A complex project design encompassing diverse sectors may be difficult to implement successfully. The project design can be rendered technically complex as it intends to deal with DB reforms and with several value chains and sectors (agriculture, mining).	Since PCN, the project has been simplified to keep it mostly a TA operation in nature (learning from similar successful operations in the region to help countries improve their investment climate, support private enterprises in selected value chains). The value chains to be supported by the project have been reduced from 5 to only 2. In addition, the project will no longer undertake the creation of a special economic zone at the Niger/Nigeria border. It will focus on providing TA to the Niger and Nigeria joint commission to have existing free trade agreements implemented between the two countries. The project investment in infrastructure will be limited to the upgrade of two existing slaughterhouses and feeder roads.
Senegal	Sustainable And Inclusive Agribusiness Development	Substantial	Yes	Yes			Risk of making the project too complex to implement successfully. The project design could be rendered technically complex if it deals with several value chains and sectors (agriculture, infrastructure, etc.). The Growth Pole approach is new in Senegal and preparation timeframe does not allow the full completion of main studies being carried out, namely the infrastructure feasibility	The project has been made markedly simpler by focusing on one growth pole and one agriculture subsector. The project supports a phased approach whereby building satisfactory land management capacity of rural communities will be a pre-requisite to infrastructure developments and land allocation to private investors. Feasibility studies related to infrastructure developments and demand assessments will be completed in parallel to this capacity building effort, therefore it is not foreseen that they will constitute a bottleneck in project implementation.

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
							studies and the Demand Assessment to ensure likeliness of Project attraction on private sector.	
DRC	Western Growth Poles	High		Yes	Yes	Yes	Project relative complexity due to high number of complementary activities, number of poles, and number of stakeholders which creates risk of coordination failures and delay in implementation. <i>Food Processing Centers</i> Potential private operators who could manage the centers may not be interested in the early phase of project implementation.	The design of the project is based on an assessment of the critical needs to support the development of targeted poles and is also based on lessons of experience. It is expected that the recruitment of experts (including private firms, specialized development partners and NGOs) to support the implementation of project activities will help mitigate the risk relate to the complexity of the project. <i>Food Processing Centers</i> To prevent this risk, the potential operators will be associated from the starting point in the project design, which will take into account their concerns. A contract could be signed between the Ministry of Agriculture and UNIDO to manage the center in the early phase or project implementation (UNIDO has experiences in managing such centers in Burkina Faso, Cameroon, Mali, Morocco, Uganda, and Senegal). Options to take over from UNIDO will be developed based on success in implementing the centers and market responsiveness.
Senegal	Casamance Development Pole	High	Yes	Yes	Yes		Despite experience of Regional Agencies in implementing IDA funded activities, multi-sector and multi-actor nature of the	This risk is taken into account by the three Regional Agencies themselves at the center of the implementation responsibility. The Bank team has had extensive discussions with the Prime

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
							project could constitute a risk in the speed of preparation, implementation and therefore disbursement rates	Minister's office, the Ministry of Economy and Finance and the Ministry of Local Government on the merits and risks of multi-sector and growth pole approaches as well as decentralized implementation arrangement.
Mozambique	Integrated Growth Poles	Moderate				Yes	Lack of demand for the IDCF facility due to the weak private sector capacity will adversely affect disbursements and project outcomes Small domestic firms may be crowded out of IDCF funding which could be dominated by large or medium foreign firms	As part of project design, an initial pipeline of potential beneficiaries has been determined prior to project approval. The project will also provide TA to potential beneficiaries to develop a pipeline of applications. The private entity managing the facility will have an output or performance-based contract. Moreover, the private entity will carry out an outreach campaign to pro-actively generate demand from the private sector. As the objective of the IDCF is for small firms and smallholder farmers to benefit from the business, technology and skills spillovers from partnerships with large/medium investors, the eligibility criteria and proportion of grant support for potential beneficiaries were aligned accordingly in the design.
Chad	Value Chain Support	Substantial	Yes		Yes		Technical complexity: The design is simple but might be complex to implement in the context of Chad. Implementation arrangement complexity: Implementation by technical departments in three ministries, by the private sector and coordination of activities by	The project design has been simplified from the concept stage, and the value chains as well as geographical scope have been limited. The project will be based in a single ministry to avoid difficulties with coordination.

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
							a PIU within the Ministry of Trade could be challenging.	
Ethiopia	Competitiveness And Job Creation	Substantial		Yes		Yes	Minimizing the risks of project complexity through selectivity is important As the project involves interventions which are sequential in nature, potential delay in implementation of some activities early on could affect the overall project implementation.	To reduce complexity and mitigate risks, the project will focus on: Leverage complementary activities that are being currently supported through other existing or pipeline projects. Synergies with the IFC IC Reform Program are being sought upstream. This includes: tax administration trade and logistics, and business licensing and registration among other components. In the area of trade logistics, the Project team is coordinating closely with FPD IC Global Practice, SDN, and PREM to leverage expertise. The team will also leverage the economic update series being conducted by the Bank's PREM team and will explore synergies with the Women Entrepreneurship Development Project (WEDP) to expand the SME linkages. Several analytical studies and technical assistance programs are underway to help inform the design of related components. For instance, a jointly led HD-FPD Skills for Competitiveness and Growth Study has been initiated to provide concrete policy directions and options to improve the availability of skilled labor for the manufacturing sector in Ethiopia, and the MSME Policy Note under preparation will help address the issue of access to finance. Coordination with Development Partners: There are ongoing interventions in private sector development by DPs

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
								which the team will explore synergies with. 2) The project design would minimize as much as possible inter-dependence among activities and would structure it in a way that would enable key activities to be accomplished at the early stage of implementation.
Guinea Bissau	Private Sector Rehabilitation and Agribusiness Development	Substantial	Yes		Yes		a. Risk that activities supported under the project are not sufficient to guarantee that cashew farmers, processors, and entrepreneurs are competitive and commercial activities are sustainable.	Focused sectorial and regional approach will facilitate achieving success in implementation. Interventions designed thinking at the most binding constraints to development of these stakeholders. Activities designed to be independent of the political cycle. The World Bank is not alone in pursuing this work. The project may be able to leverage additional support from other donors (EU, AfDB, UNDP). Successful implementation can lead to additional financing of the designed pilots. Impact evaluations are integrated in the project to learn from implementation and inform next stage of the policy dialogue. The areas selected by the project are those in which the client has demonstrated will to move ahead. PCU will include specialists per component to ensure adequate project monitoring. Design of multiple interventions relies on background studies which indicate the need to complement more than one

Country	Project Name	Design Risk Rating	Technical	Scope/Coverage	Impln./Instt. Arrangements	Design Flexibility	Risk Description	Proposed Mitigation Measure Description
							b. Multiple interventions can lead to difficulties in implementation.	activity to be able to successfully achieve the objectives of the project. Activities such as business environment that involve more than one partner are areas where the Bank and the IFC have significant experience being able to add support in implementation.

Source: World Bank

Note: Columns 4-7 represent the authors' assessments of whether World Bank staff self-assessment of project risk and proposed mitigation measures were consistent with the guidance given to project teams in the World Bank document 'Guiding Questions to the ORAF' – we utilized section 4.1 (pages 10-11) for purposes of our assessment. It is possible that risks were not identified by task teams on the basis that they were not considered relevant for the project.

We utilized World Bank project appraisal documents (Annexes) containing the Operational Risk Assessment Framework; the text in this table is reproduced verbatim from World Bank documents (Columns 8 and 9).

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