

## Appendix A: Supplemental Information

The IDA and IBRD projects included in our matched sample were predominantly focused on transport, energy, agriculture, forestry, fishing, and various forms of infrastructure (e.g. water supply, social infrastructure). In terms of number and cost, they were similar to the composition of the broader sample of IDA and IBRD projects approved between 2000 and 2011 (Tables S1 and S2). However, projects adjacent to IBAs seem to be relatively more focused on the “hardware” of economic development (e.g. transportation and infrastructure) and relatively less focused on social sector and institutional building activities (Tables S1 and S2) than all projects.

The projects adjacent to IBAs are also observably different from the broader sample of IDA and IBRD projects approved between 2000 and 2011 on another dimension: environmental safeguards (Figure S1). The World Bank has ten mandatory environmental and social safeguard policies. One of these policies – the Operational Policy 4.01 on Environmental Assessment (World Bank 1999) – requires that the World Bank screen projects prior to approval to identify their potentially adverse environmental impacts. To this end, the World Bank classifies proposed projects into one of four environmental categories (A, B, C, and F). Category A projects are likely to have “significant adverse environmental impacts that are sensitive, diverse, or unprecedented.” Category B projects have “potential adverse environmental impacts on human populations or environmentally important areas – including wetlands, forests, grasslands, and other natural habitats – which are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects.” Category C projects are “likely to have minimal or no adverse environmental impacts. Beyond screening, no further (environmental assessment) action is required.” Category F projects “involve investment of Bank funds through a

financial intermediary, in subprojects that may [or may not] result in adverse environmental impacts.”<sup>i</sup>

Those projects that are expected to result in adverse environmental impacts are subjected to the World Bank’s most stringent environmental safeguards. These include, but are not limited to, requirements that project implementers avoid building infrastructure in or near natural habitat areas; create nature reserves or strict protection zones alongside infrastructure corridors; maintain canopy tree cover over linear infrastructure to create "arboreal bridges"; build overpasses and underpasses to facilitate wildlife migration near linear infrastructure; ensure that there is proper drainage underneath newly constructed infrastructure to avoid changing the flow and salinity of water in way that might degrade aquatic and terrestrial biodiversity; offset expected habitat loss by supporting compensatory protected areas or engaging in other ex-situ conservation activities (e.g. supporting arboretums, zoos, safari parks, seed banks); establish nursery gardens in project areas to cultivate seedlings and restore vegetation; dispose of solid and liquid wastes in a manner that does not do not degrade wetlands and waterways; reclaim borrow pits to protect wild flora and fauna; and convert organic waste into organization fertilizer that can be used to support the growth or regrowth of local vegetation.

The results reported in Figure S1 indicate that, in comparison to the broader sample of IDA and IBRD projects approved between 2000 and 2011, the projects adjacent to IBAs were significantly more likely to be subjected to the World Bank’s most stringent environmental safeguards (i.e. those projects classified as Category A or B projects). These projects also involved higher levels of environmental expenditure (Table S3).

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<sup>i</sup> Under Operational Policy 4.01 on Environmental Assessment, the financial intermediary must screen sub-projects and conduct appropriate environmental assessments of those sub-projects.