ANALYSIS AND
POLICY BRIEF N°30

IOB
Institute of Development Policy
University of Antwerp

August 2018

Aid, Trade, or State? The Post-War Recovery of the Rwandan Coffee Sector

The nature of the Rwandan State and its role in the country's post-war economic recovery is much debated. In a recent article, we investigate the post-war recovery of the Rwandan economy through the lens of its coffee sector. The recent transition from the ordinary to the specialty coffee segment has been portrayed as emblematic of Rwanda's rise from the ashes, after decades of dramatic violence. Our study, however, shows that this success needs to be qualified.

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Miracle recovery

Since the turn of the century, Rwanda's economic recovery has been stunning: an average annual growth rate of real GDP per capita of 4.7%, increased life expectancy from 46.3 in 1999 to 66.6 in 2015, doubled primary school completion rates, reduced rural poverty, etc. This stunning progress came unexpectedly. At the end of the nineties, Rwanda was picking up the pieces of the 1991-94 civil war, the 1994 genocide against Tutsi, and the 1994-98 (counter-)insurgency. Under these circumstances, several donors and observers expected Rwanda to experience at best slow economic recovery and fears remained that it would slide back into violence. How did Rwanda manage to escape the vicious circle of conflict and poverty?

Massive Aid and a Facilitative State

Some have argued that Rwanda's post-war success story is rooted in the combination of massive foreign aid and technical assistance as well as a complete redesign of the economy by a developmental (authoritarian) state. The Rwandan government has invested heavily in the promotion of private-sector development by stimulating human capital accumulation through investments in health and education, and by improving public infrastructure and the business environment. Moreover, the Rwandan State has followed the Washington consensus of liberalizing markets, not least those of the two most important agricultural export sectors: coffee and tea. At the same time, however, it has displayed a very direct and active form of market intervention.

Unanswered questions

In the debate on the Rwandan State and Rwanda's economic performance, there remain many unanswered questions. Our research contributes to addressing two important ones. First, what is the role that domestic policies played in stimulating Rwanda's impressive growth? Second, is the recovery process shared equally across the country? It is with these two broad questions in mind that we study the coffee sector in Rwanda.

Box 1. The Rwandan coffee sector as a case study

Although one economic sector cannot be taken as representative for the entire economy, learning about the coffee sector is interesting, both in itself and for gaining insights into the broader development processes in Rwanda. First, the coffee sector is economically very relevant for the country, not only in terms of employment (there are an estimated 400,000 coffee farmers), but also as a key source of export revenues. Second, the sector's liberalization and its transformation from a supplier of ordinary coffee to a player in the market of specialty coffee fits in the country's broader aim to free up markets and specialize in high value agricultural commodities. At the same time, the direct involvement of the military investment company Horizon group (in building and managing washing stations) and of the ruling party's Crystal Ventures Ltd. (as majority owner of the Bourbon coffee shops) is exemplary of the direct involvement of politically affiliated actors in Rwanda's economy. Third, the turnaround of the Rwandan coffee sector is widely perceived as a success story, on par with the impressive national growth figures. Finally, a more practical reason for studying the coffee sector is the availability of unique data from nationwide coffee censuses (1999, 2003 and 2009) as well as data on the installation of coffee washing stations , allowing us to trace coffee investments through time and across space.

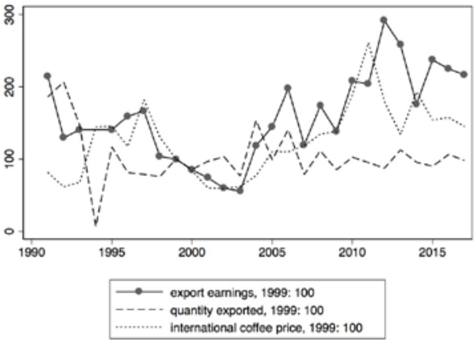
Coffee washing stations are facilities that use spring water to remove the fruity pulp from the coffee cherries, separating out the beans that are then dried and stored for marketing. The process is semi-automated, and allows for several quality control methods to be employed to sort the coffee into various grades.

Riding the wave of world market prices for coffee

Regarding our first research question, we show that the 37% rise of Rwandan coffee export earnings over the decade 1999-2009 is mainly driven by world market prices for coffee, which rose by 39% over the same period (see Figure 1). Increases in the quantity and quality of coffee produced played only a secondary role. In fact, few coffee washing stations run at full capacity, and the average capacity used was a mere 29% in 2009. As a result, the production of fully washed coffee, which began in 2002, remained far below targeted production. In 2009, its market share reached 19% (see Figure 2), which is quite an achievement, but far below the target (of 60%) set in 2002. In fact, it is only in 2017 that the production of fully washed coffee passed the 50% threshold, reaching 52% of total production.

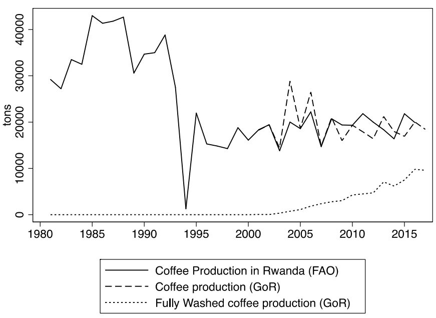
Thus, while the strategic repositioning of the Rwandan coffee sector from a supplier of ordinary coffee to a player in the market for specialty coffee has been presented as the vehicle for higher prices received by coffee farmers, the data indicate that its importance is dwarfed by the exogenous steep increase in international coffee price. Admittedly, one is not independent of the other. In particular, it is possible that, were it not for the domestic policy change, the Rwandan coffee sector could not have ridden the wave of the upturn in the international coffee market. We therefore turn to a subnational analysis to shed further light on the role of domestic policies.

Figure 1: Coffee Export Volume, Export Earnings, and International Price



Note: International coffee price is the New York price index. Production and export value are taken from FAO and various NAEB reports. All series are normalized to equal 100 in 1999.

Figure 2: Coffee Production in Rwanda



Note: Values are taken from FAO and various NAEB reports. The graph highlights some discrepancies between the two sources for the years after 2003.

From war overhang to catch up, with the help of 'ice breakers'

Our subnational analysis clearly reveals that the recovery of the sector was not homogeneous across the country, and that post-war investments in the coffee sector vary with conflict intensity. Farmers in heavily affected regions planted fewer new trees and maintained existing trees less well up to several years after the conflict (in 1999 and 2003).

This finding is consistent with a 'war overhang effect', which results from the 'bad news' of civil war raising perceived uncertainty of future returns on assets, thus discouraging investments. It is also in line with a small number of existing micro-empirical studies that show that violence affects households' behavior and production decisions, often constraining rural households to subsistence farming. Other studies on Rwanda have shown evidence of gaps between low and high conflict intensity areas in terms of household consumption and cattle stock. Since these studies look at a single data point shortly after the end of conflict, little is known, however, on the evolution over time of these gaps: are they closing or widening?

Our analysis shows the gap between low and high conflict intensity areas closed within 15 years from the peak of violence, suggesting that the armed conflict had not caused permanent local poverty traps. We argue that the recovery in heavily affected areas was stimulated by large and highly visible public investments in the coffee sector, by both donors and the State, that acted as 'ice breakers' and helped restoring confidence in coffee production. The most impressive and visible example is represented by the creation of coffee washing stations, which increased in number from 2 to 120 in the period 1999 to 2009 and has kept growing ever since, reaching 245 in 2015. While the stations were established across the country, irrespectively of conflict exposure, our analysis suggests that their presence has been particularly effective in spurring new investments in coffee trees in those areas that were more severely hit by the violence, as the 'war overhang' effect was likely more severe there.

Policy implications

Nuancing the numbers

The post-war recovery of the coffee sector is largely perceived as a success story, and its success is attributed to donor and government policies that freed up markets and enabled the sector to reposition itself as a supplier of specialty coffee. Our findings underline the need for critically evaluating the data and numbers, and call for caution whenever applauding the transformation of the sector. Our findings speak to the debate on the relative importance of domestic policies versus external factors in explaining the recent African economic growth, siding with the strand of the literature that questions the robustness of the recent growth spurt, qualifying it as being mostly driven by high commodity prices rather than by real structural reforms. On the other hand, the finding that internal factors are dwarfed by external factors, does not imply that the former were unimportant. They could still have played a crucially catalyzing role, without which the Rwandan coffee sector may have been unable to follow the upward international trend.

The importance of signaling

The results of our subnational analysis indicate that investments in new coffee trees and maintenance of existing trees were lagging behind in conflict areas, up to five and nine years after the end of massive violence. However we observe no long-lasting local poverty traps. Fifteen years down the road there are clear signs of catch-up: by 2009, farmers in heavily affected areas invested no less in new trees compared to farmers in less affected areas.

While the promotion of specialty coffee may not have contributed much to the overall rise in coffee production, it may have contributed to the post-war micro-level catch-up process by affecting expectations and/or human relations and thereby farm investments in coffee trees. Although this aligns well with research on the role of washing stations in building trust in Rwanda, the bad news/good news hypothesis needs further investigation. If confirmed, it would imply that the signaling function of policies in post-war settings is crucially important in countering a war overhang effect.

For more details, please refer to our full analysis in Journal of Eastern African Studies (https://doi.org/10.1080/17531055.2018.1480091).