Program for the National Budget Conference & Economic Growth Forum FY 2019/18

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Session 1: Agriculture and Agro-Industrialization

Constraints to Promotion & Value Addition in Uganda's Coffee Sector

Outline

1. **Uganda's Coffee Sector: some facts**

2. Description of potential new IGC project:

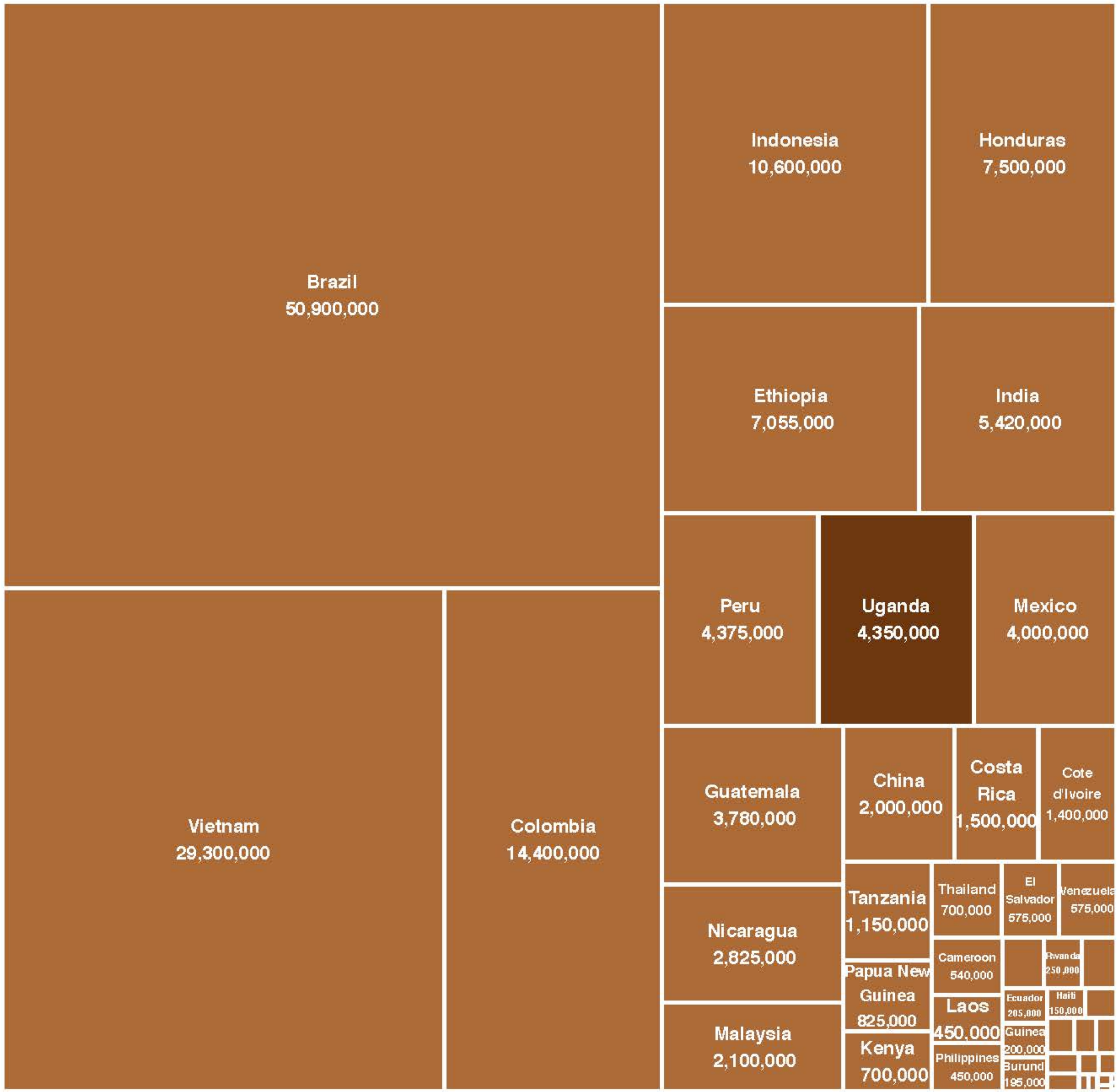
   Quality Upgrading and Contract Enforcement in Uganda's Coffee Sector, joint with Lauren Bergquist (Michigan) and Ritwika Sen (Kellogg)

   this relates to the assigned focus question (and others):

   How can the regulatory system for input and output markets be strengthened or re-organized to enforce quality?

Global Coffee: Production

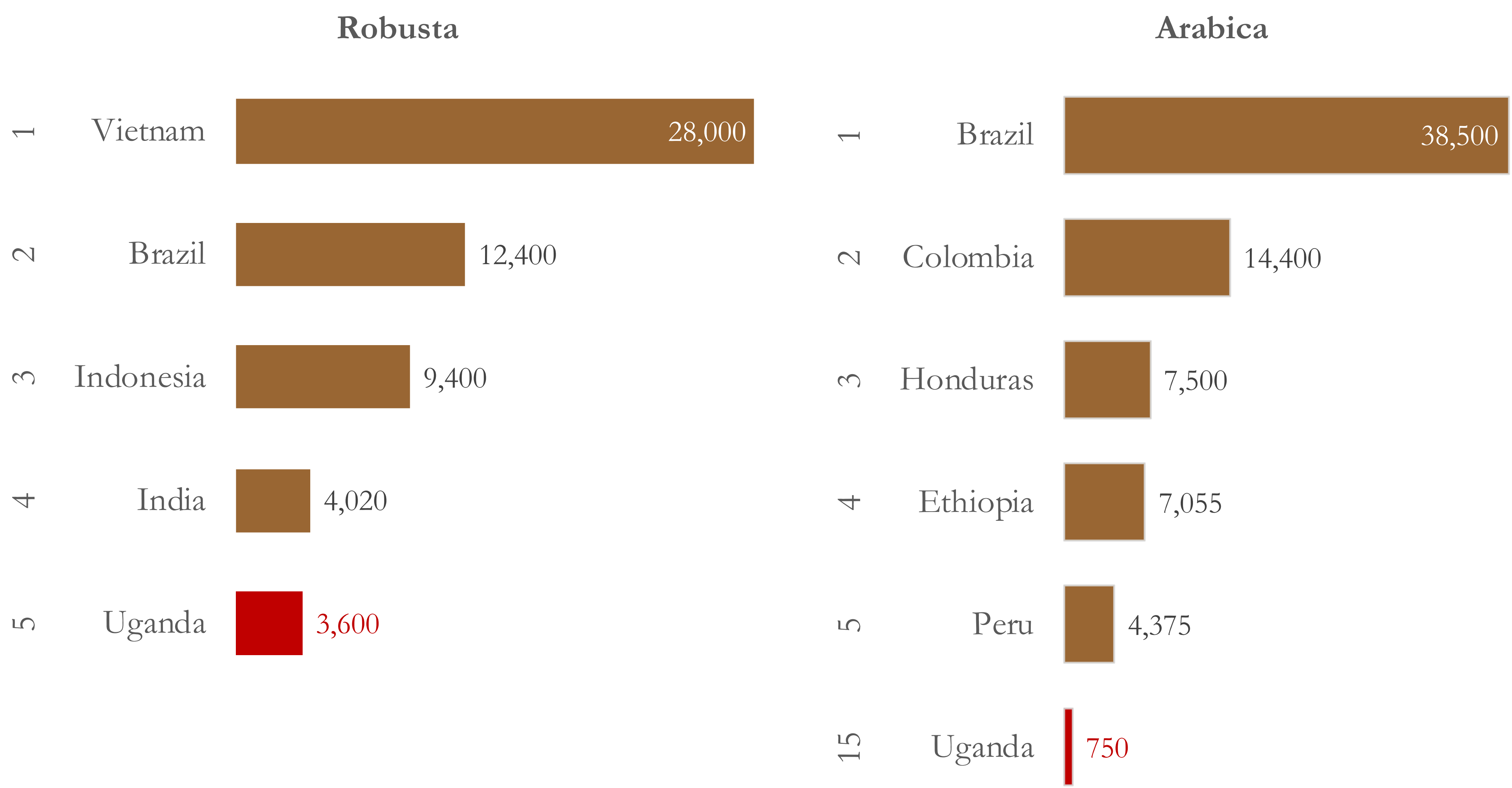
Uganda is an important player



Source: International Coffee Organization, 2017/18

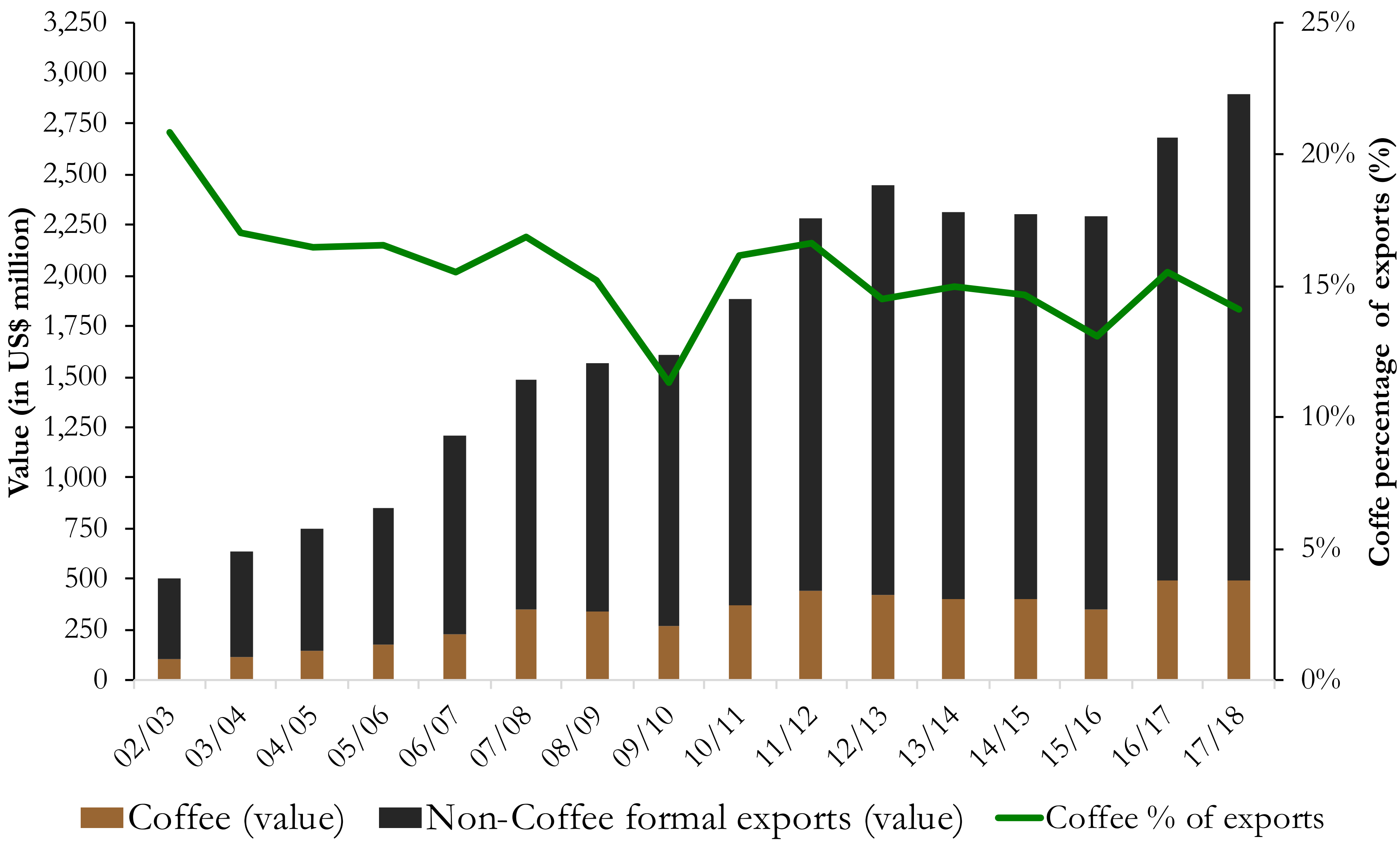
Global Coffee: Production

Uganda is an important player in both coffee varieties



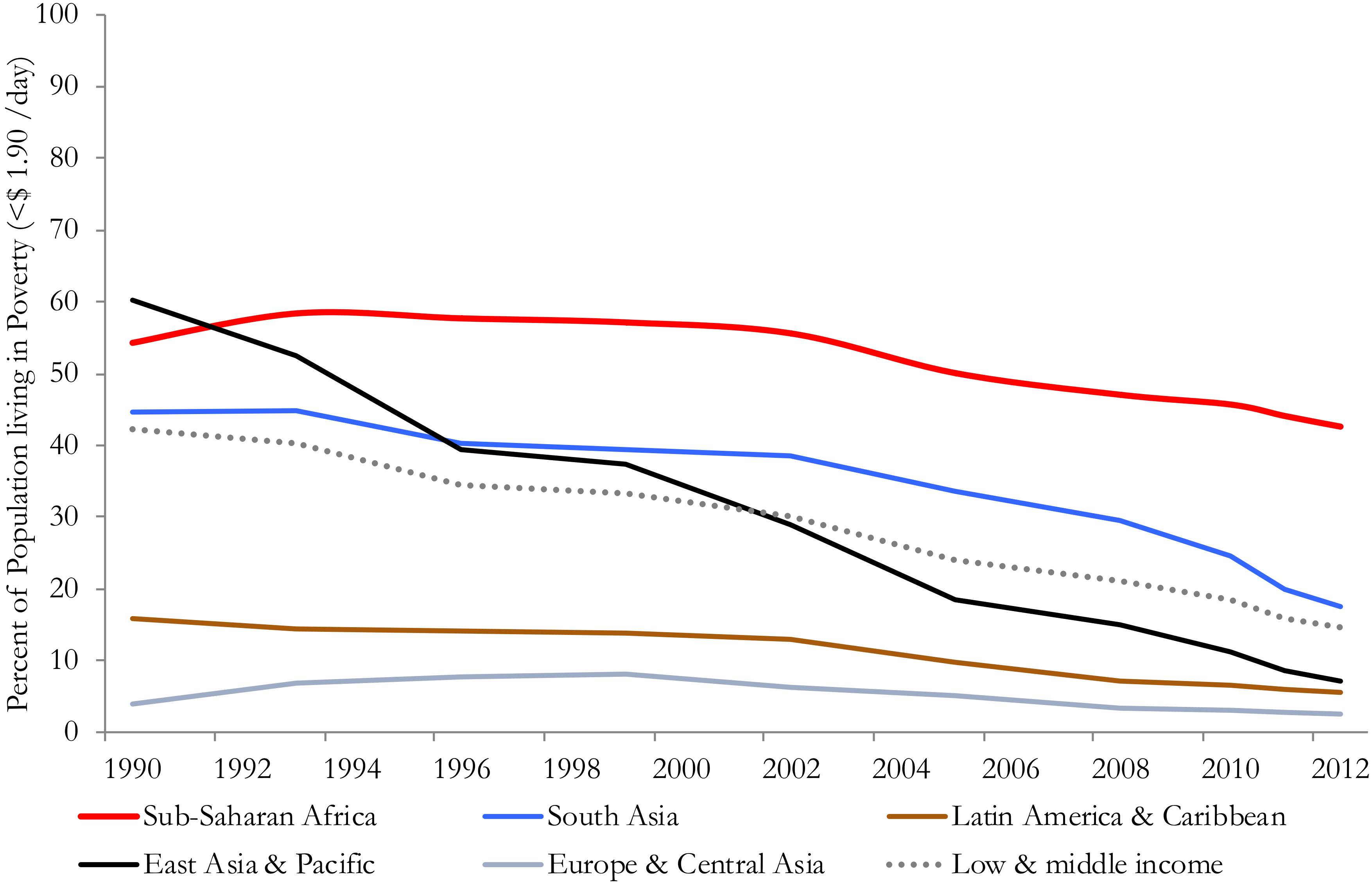
Source: United States Department of Agriculture Foreign Agricultural Service, '000 60 Kg bags, 2017/18

Uganda's Macroeconomics:
Coffee is a stable contributor to FX earnings (15%)



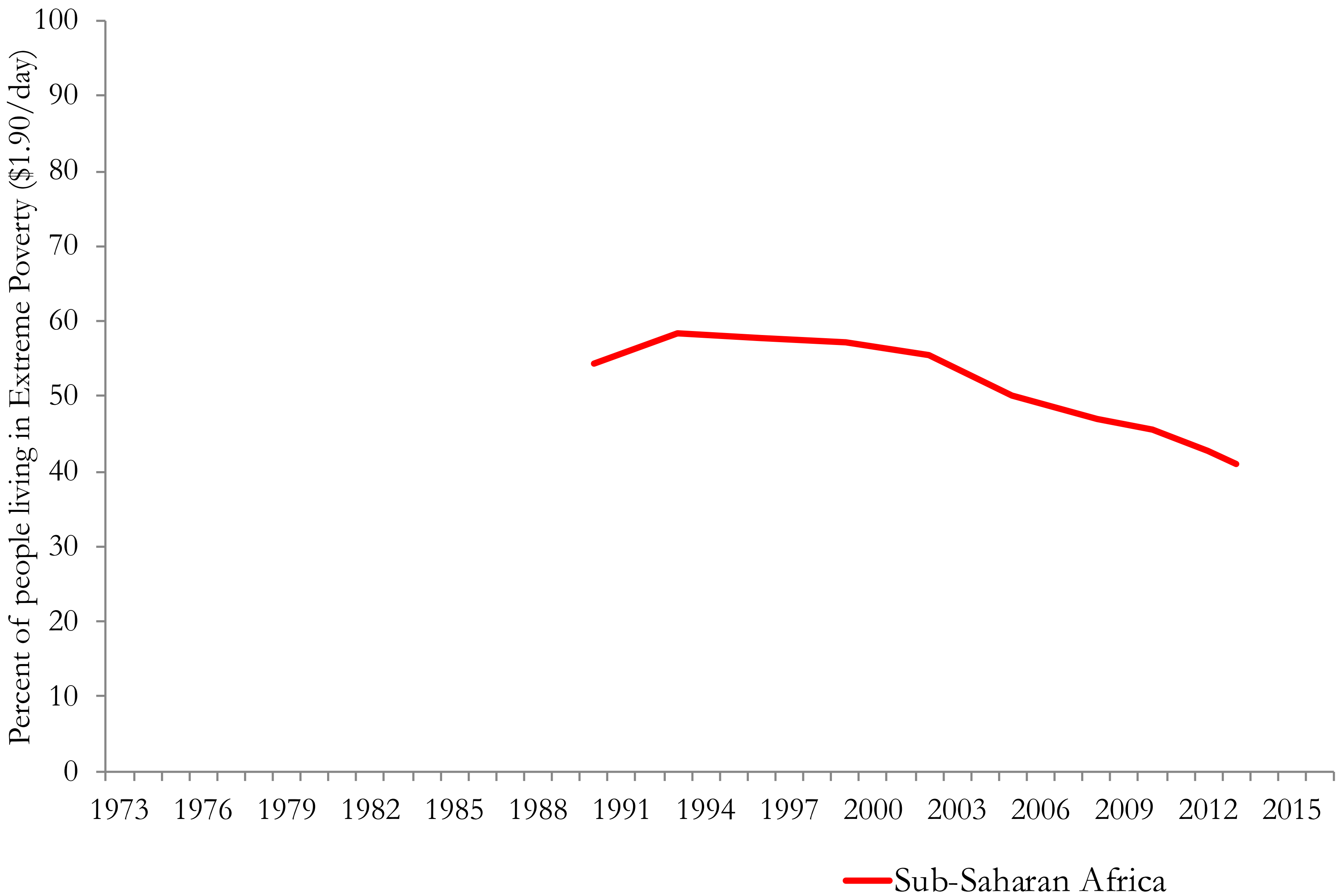
Source: Bank of Uganda

Poverty reduction in Africa lags other regions



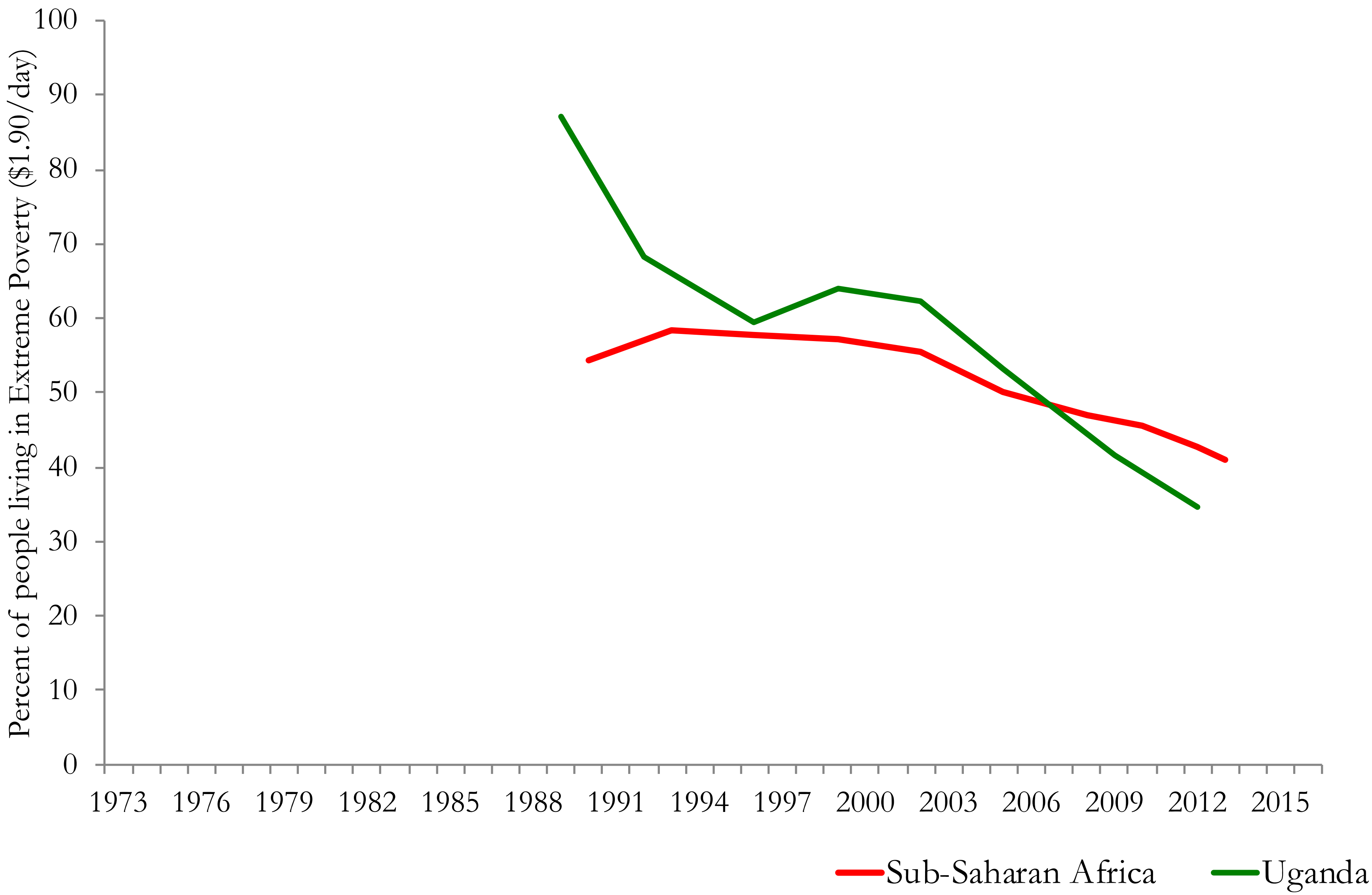
Source: World Development Indicators, 2016

Within Africa



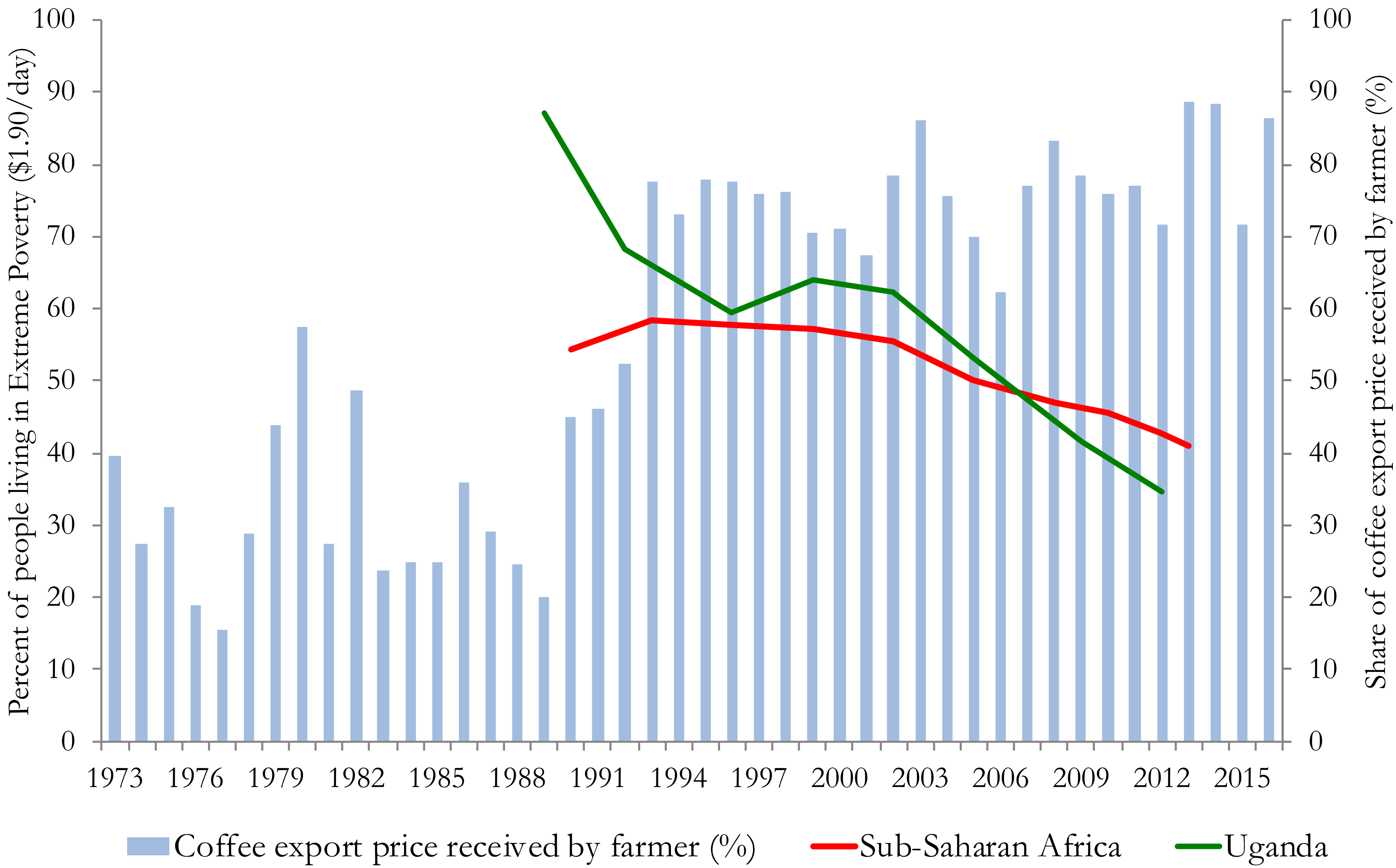
Source: World Development Indicators, 2016

Within Africa: Uganda impressive progress



Source: World Development Indicators, 2016

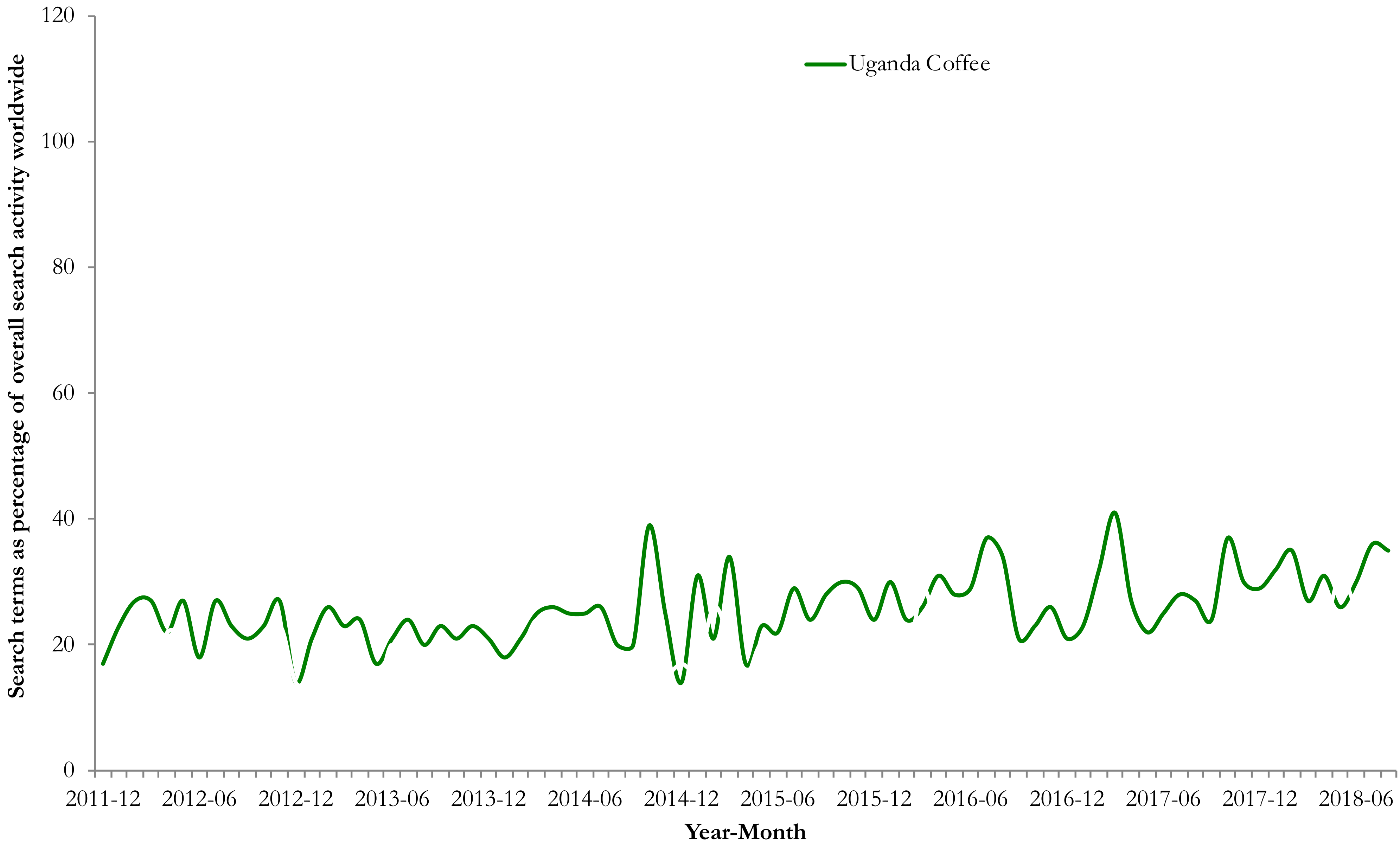
Within Africa: Uganda impressive progress, benefits of 1990s agricultural reform



Source: World Development Indicators, 2016; Bibangambah (1996), Akiyama (2001), authors calculations on UCDA reports (various), Bank of Uganda

Awareness of Ugandan Coffee

Google Search Activity



Source: author's calculation on Google Trends, accessed August 31, 2018

Awareness of Ugandan Coffee

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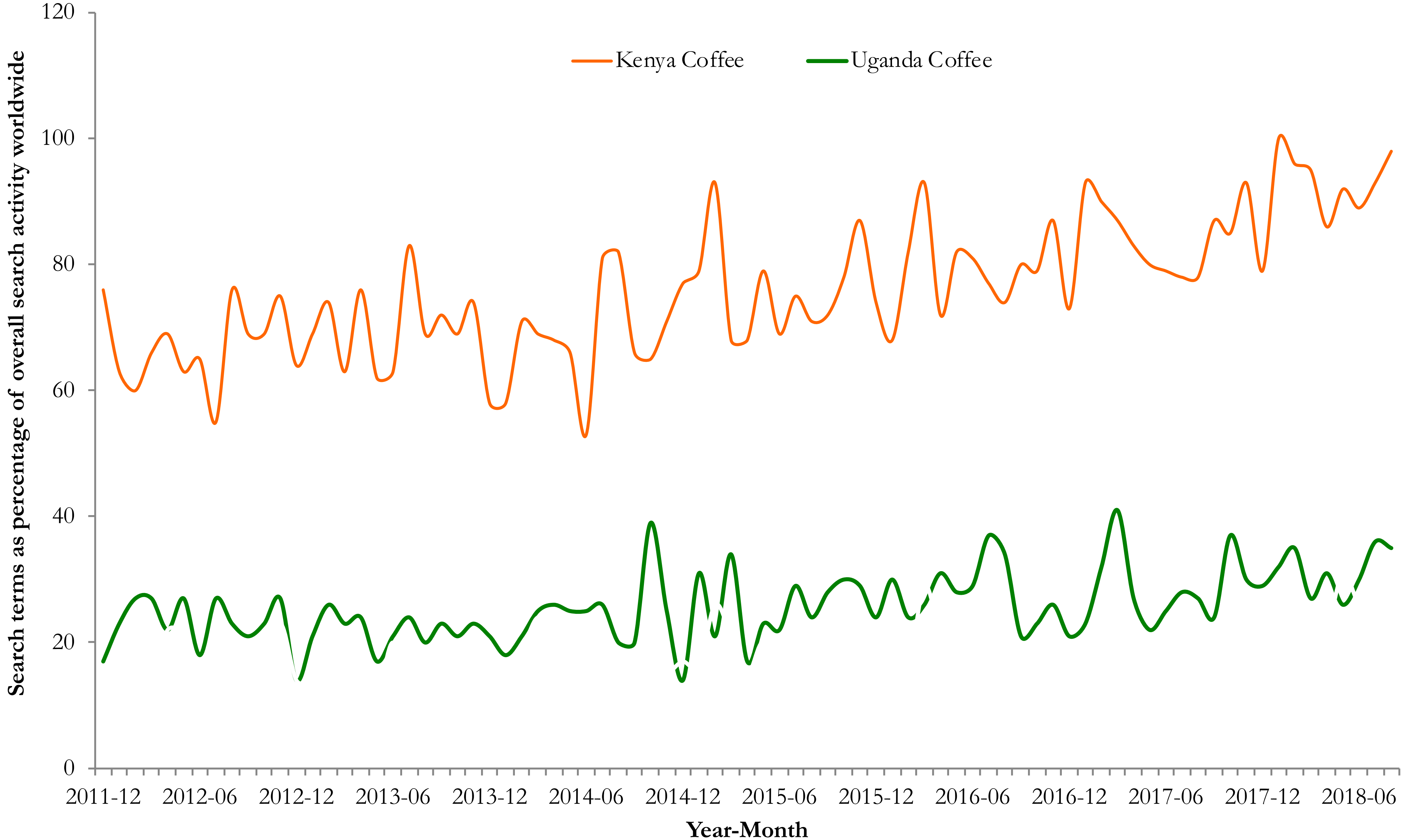

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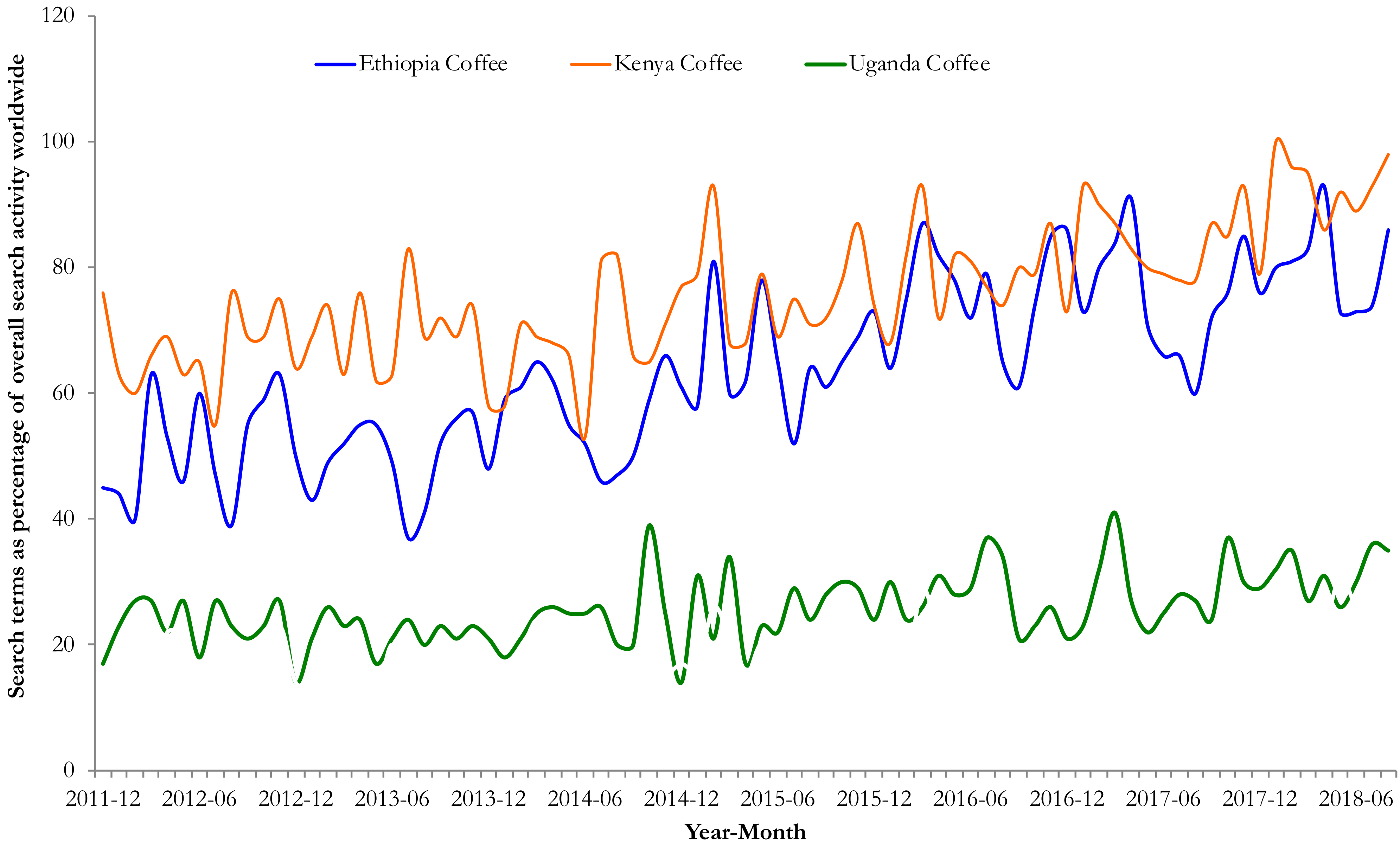

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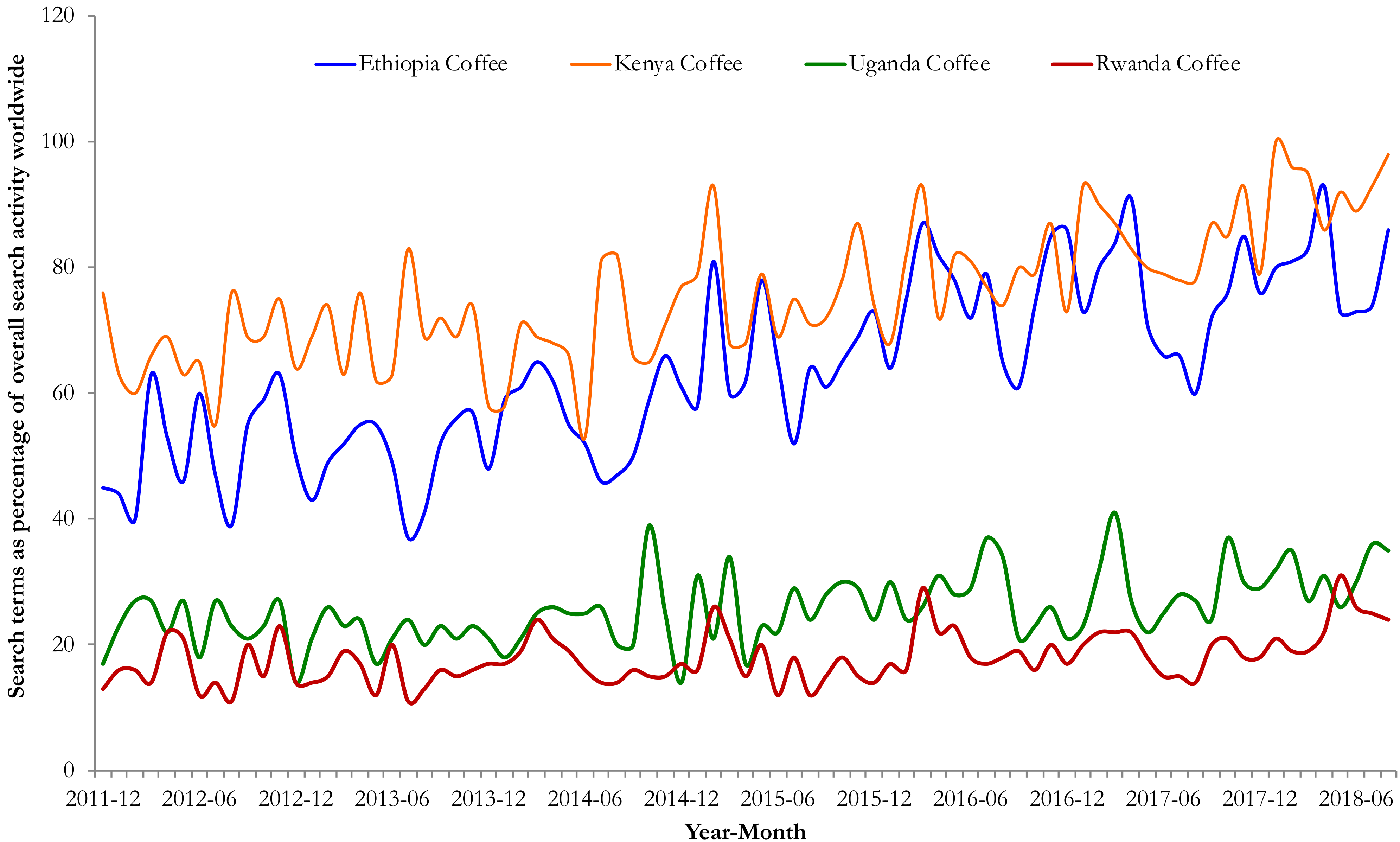
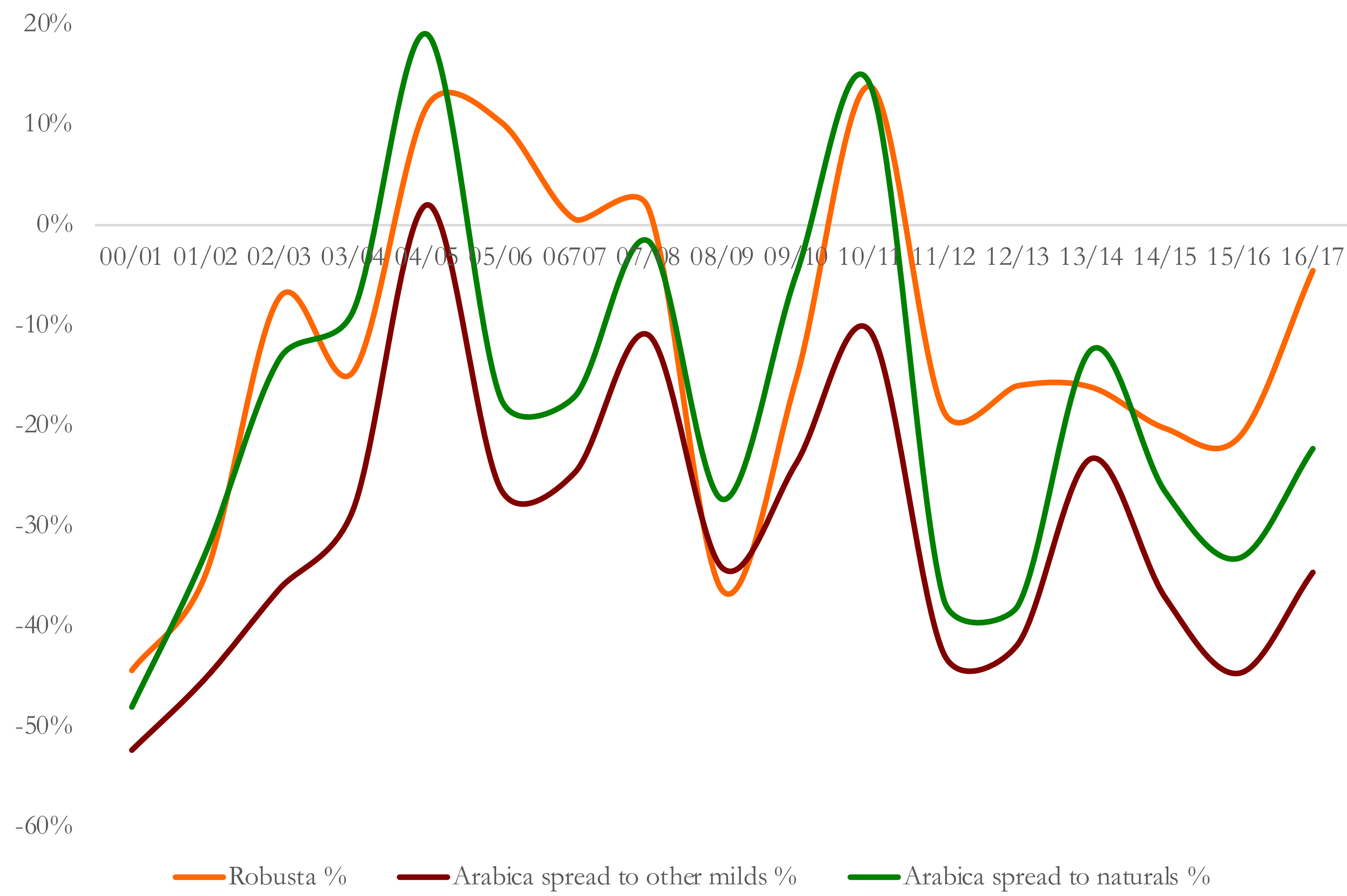


Source: author's calculation on Google Trends, accessed August 31, 2018

Ugandan Coffee Spreads compared to the ICO Price Index

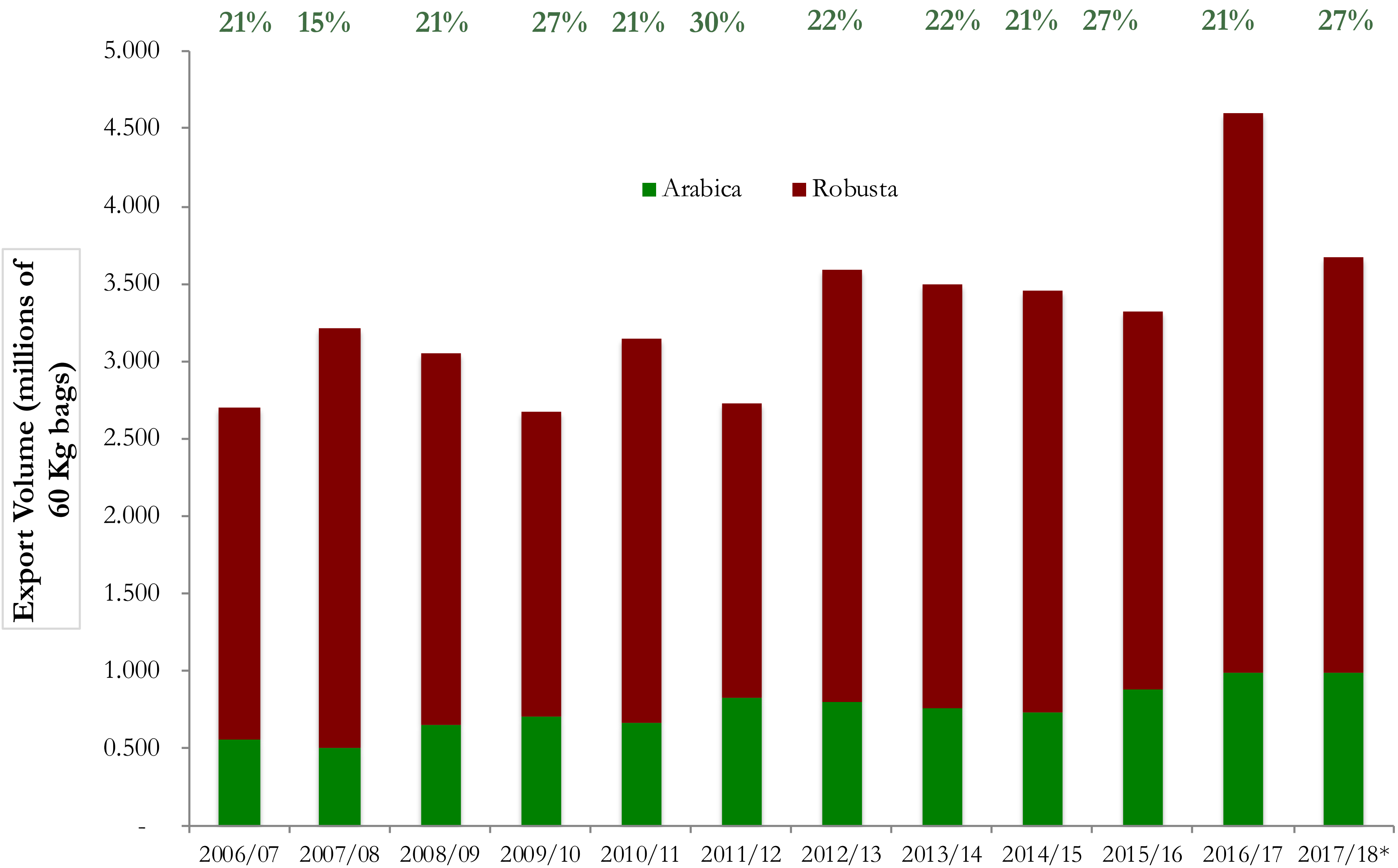
Reflects some of the lack of the awareness and maybe quality of UG coffee



Source: authors calculation on ICO data, 2000/01 – 2016/17

Ugandan Varieties

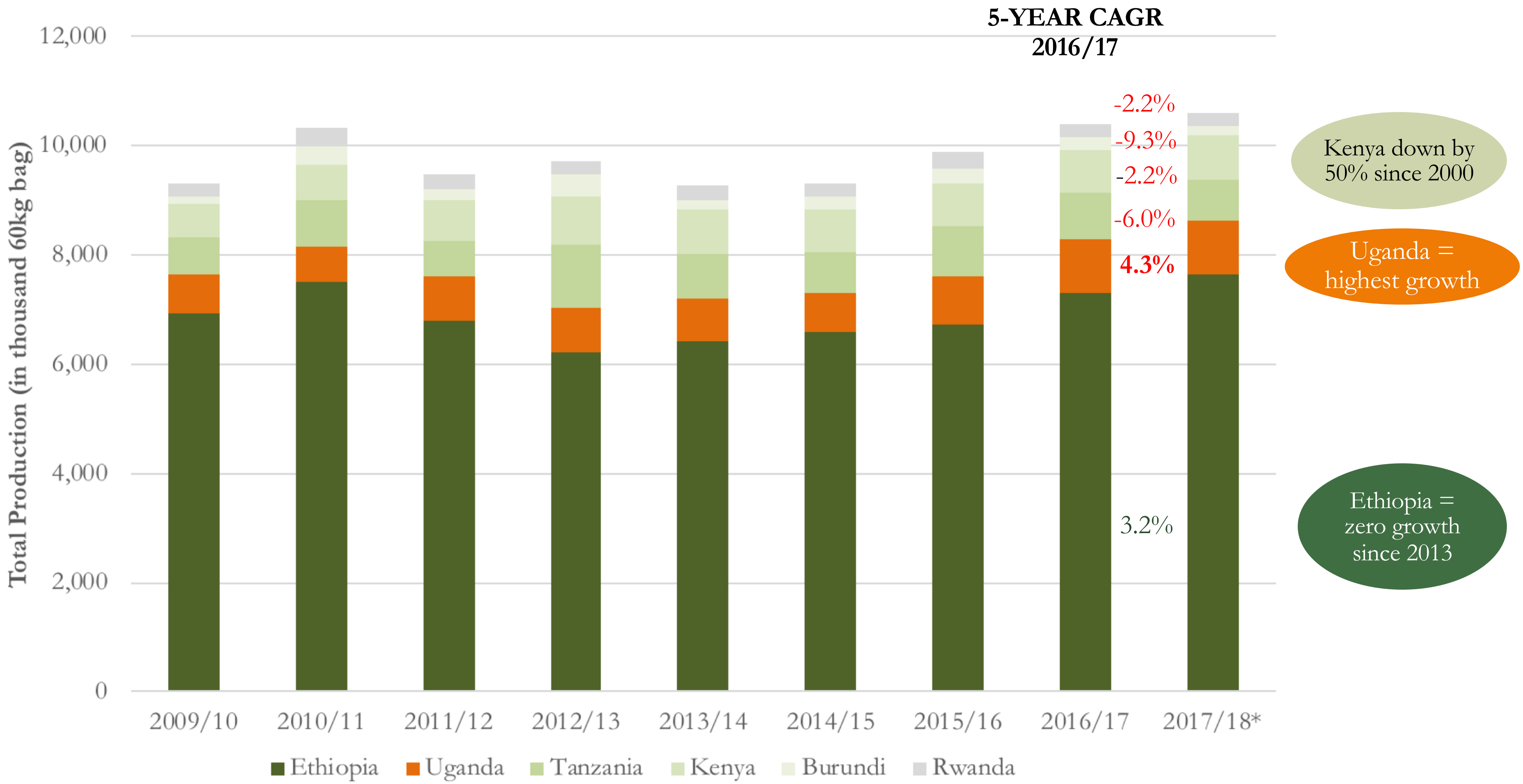
Over 23% of exports Arabica, and growing



Source: author's calculation on UCDA Monthly Reports 2006/07 – 2017/18*

Uganda Arabica

Most dynamic market in East Africa with highest growth potential



Source: ICO; y-axis is '000 of 60 kg bags

Ugandan Coffee Exporters: Market Structure Snapshot

Dominated by a few players

Rank	2009/10		2014/15		2017/18*	
1	Kyagalanyi Coffee Ltd	401,404	Ugacof (U) Ltd	625,986	Kyagalanyi Coffee Ltd	491,298
2	Ugacof Ltd	336,554	Kyagalanyi Coffee Ltd	345,272	Ugacof (U) Ltd	461,446
3	Kawacom (U) Ltd	331,667	Kawacom (U) Ltd	314,285	Ideal Commodities	392,429
4	Savannah Commodities Ltd	206,321	Olam (U) Ltd	278,598	Olam (U) Ltd	380,719
5	Great Lakes Co Ltd	201,158	Ibero (U) Ltd	246,195	Ibero (U) Ltd	247,418
6	Ibero (U) Ltd	186,406	Ideal Commodities	233,187	Touton Uganda Limited	213,893
7	Kampala Domestic Store	154,242	Export Trading Company	192,238	Export Trading Company (U) Ltd	192,159
8	Olam (U) Ltd	153,548	Kampala Domestic Store	178,142	Kawacom (U) Ltd	176,379
9	Job Coffee	147,502	Besmark Coffee Co. Ltd	156,803	Besmark Coffee Co. Ltd	147,636
10	Pan Afric Impex	125,041	Ishaka Commodities	107,245	Kampala Domestic Store	121,190
Top 10 - Volume		**2,243,843**		**2,677,951**		**2,824,567**
Total Industry - Volume		**2,668,971**		**3,455,852**		**3,664,506**
Share of top 10		**84%**		**77%**		**77%**

- Concentration patterns similar across EA
- Mix of domestic and MNCs
- Market structure is important for interventions and regulation

Source: author's calculation on UCDA Monthly Reports 2009/10 – 2017/18*, 60 kgs bags

Ugandan Coffee Global Buyers: Market Structure Snapshot

Dominated by a few players

Rank	2009/10		2014/15		2017/18*	
1	Ecom Agro-industrialists	289,803	Sucafina	569,567	Sucafina	429,663
2	Sucafina	228,504	Olam International	333,729	Olam International	390,006
3	Socadec	220,685	Ecom Agro Industrialist	262,441	Al-Tasheel	232,902
4	Abaco International	202,722	Bernhard Rothfoss	257,845	Volcafe	218,042
5	Bernhard Rothfoss	179,883	Al-Tasheel	217,508	Touton Geneva S.A	164,359
6	Aldwami	169,784	Aldwami	147,710	Bernhard Rothfoss	147,484
7	Olam International	149,946	Icona Café	122,762	Ecom Agro Industrialist	144,494
8	Decotrade	135,240	Socadec	112,845	Aldwami	137,200
9	Volcafé	120,517	Strauss Commodities	107,846	Bernhard Rothfos	106,038
10	Cofftea (Sudan)	98,684	Abaco International	96,220	Strauss Commodities	82,413
Top 10 - Volume		1,795,768		2,228,473		2,052,601
Total Industry - Volume		**2,668,971**		**3,455,852**		**3,661,636**
Share of top 10		**67%**		**64%**		**56%**

- Prominent global buyers similar across EA
- Mainly traders not roasters*
- Many have signed up for procuring more sustainable and traceable coffee in the near future

Source: author's calculation on UCDA Monthly Reports 2009/10 – 2017/18*, 60 kgs bags

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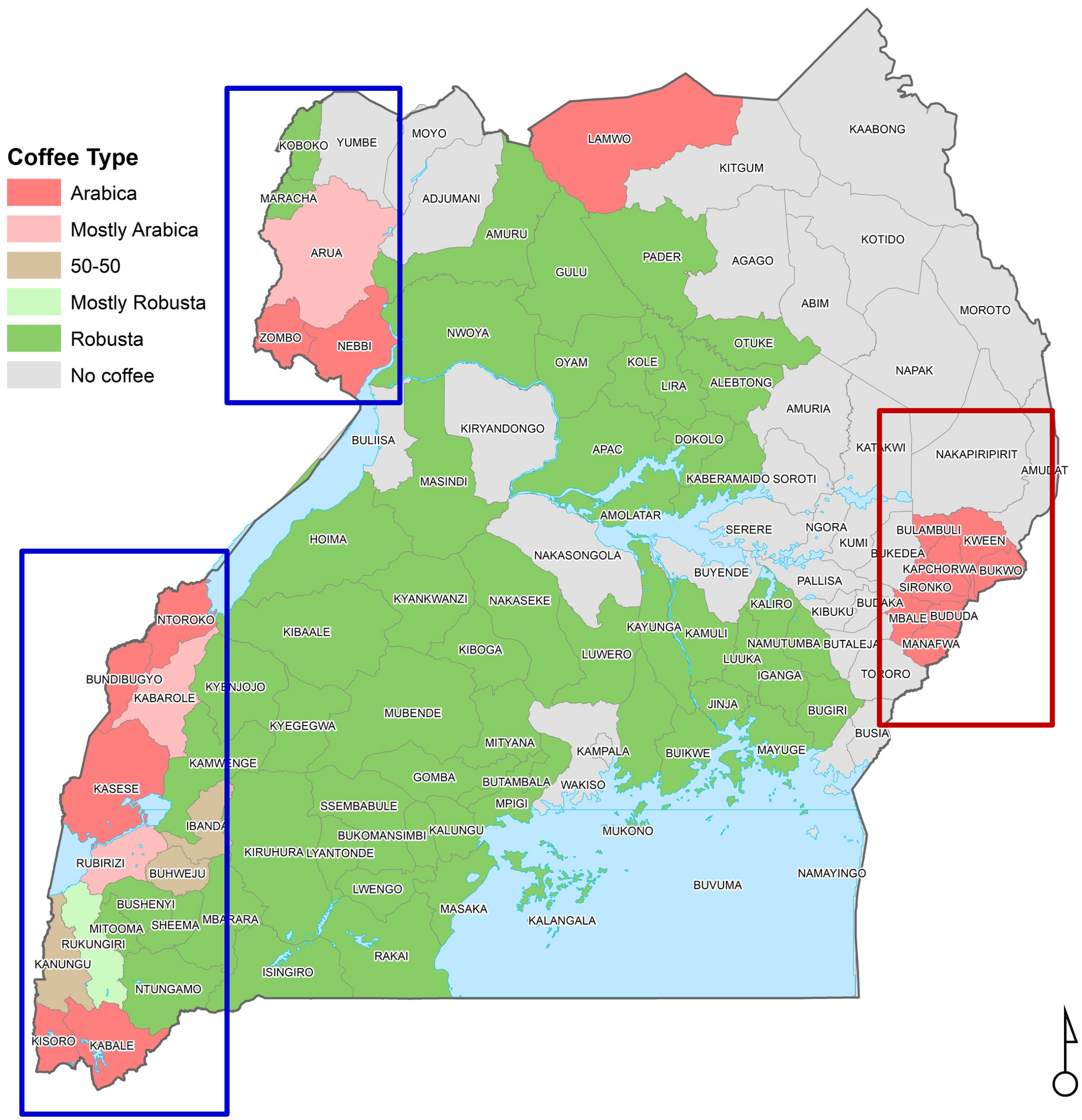
Major drivers of Value in Arabica

Multiple actors and their incentives

Source: Morjaria & Sprott, Project field notes, August 2017

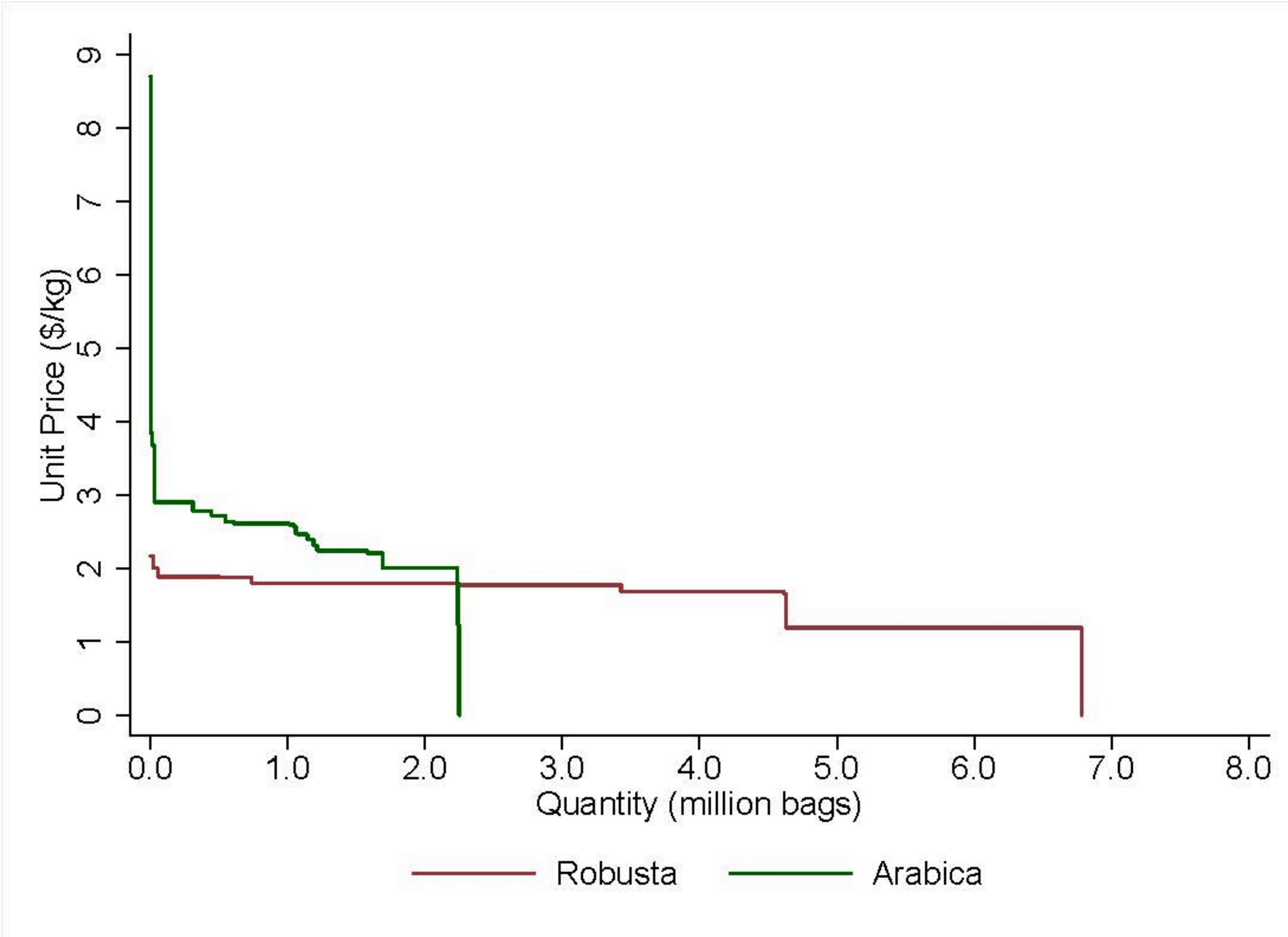
Uganda Arabica

Broadly a Tale of Two Regions



Uganda's Price Curves

*Arabica and Robusta varieties 2017/18**



Source: author's calculation on UCDA Monthly Reports 2017/18*

Uganda's Price Curves: Upgrade

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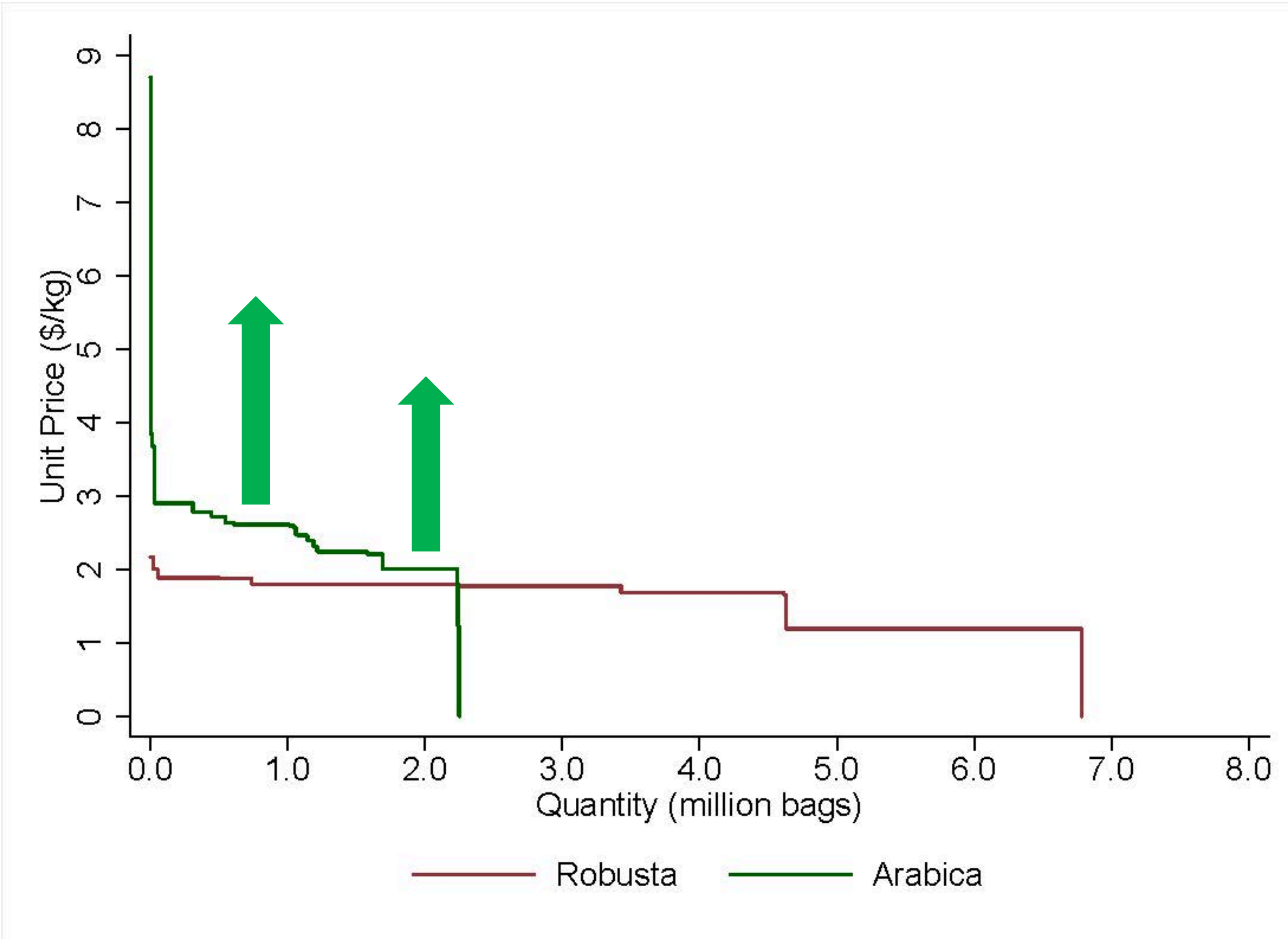

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Uganda's Price Curves: Upgrade

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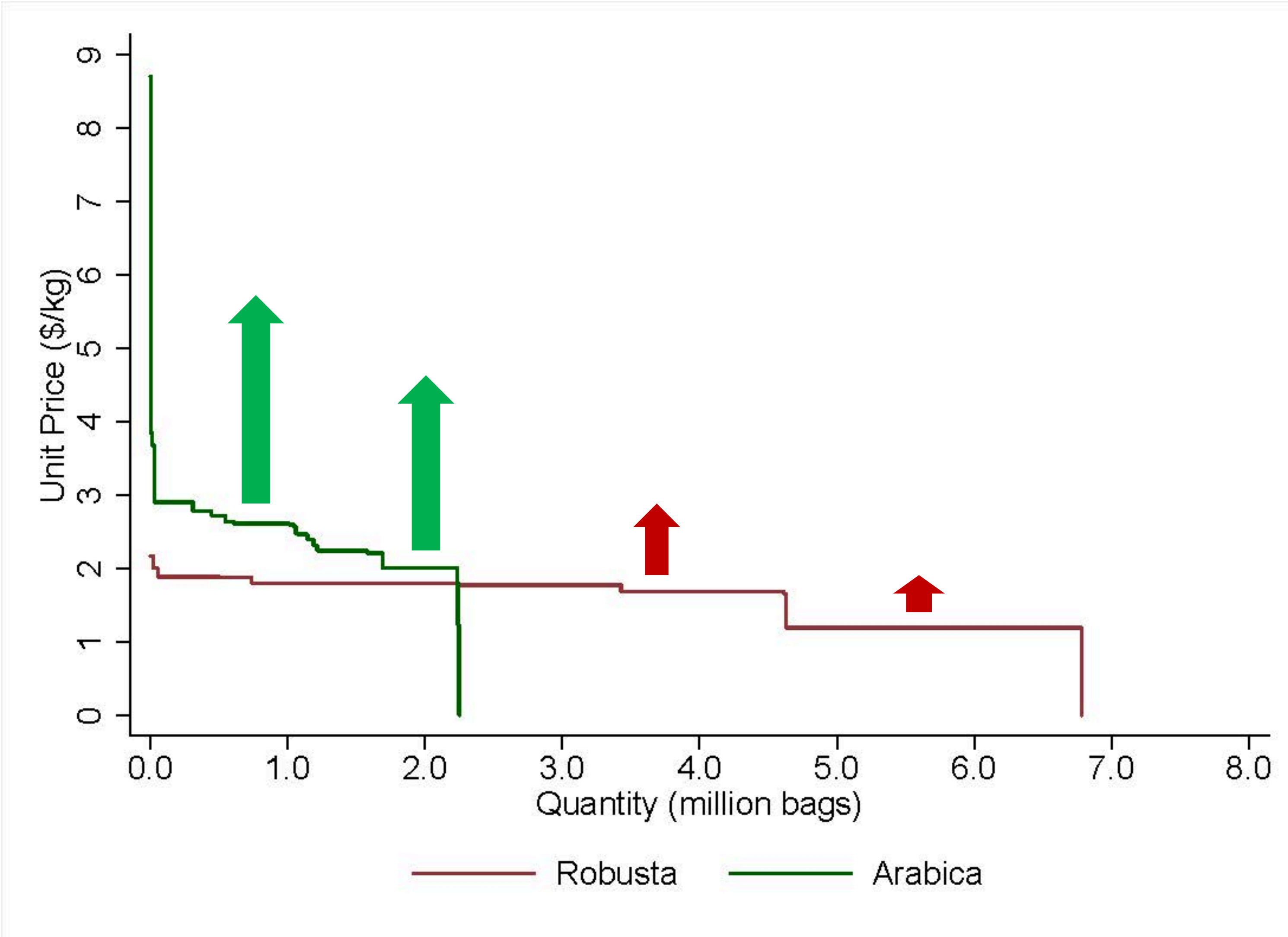

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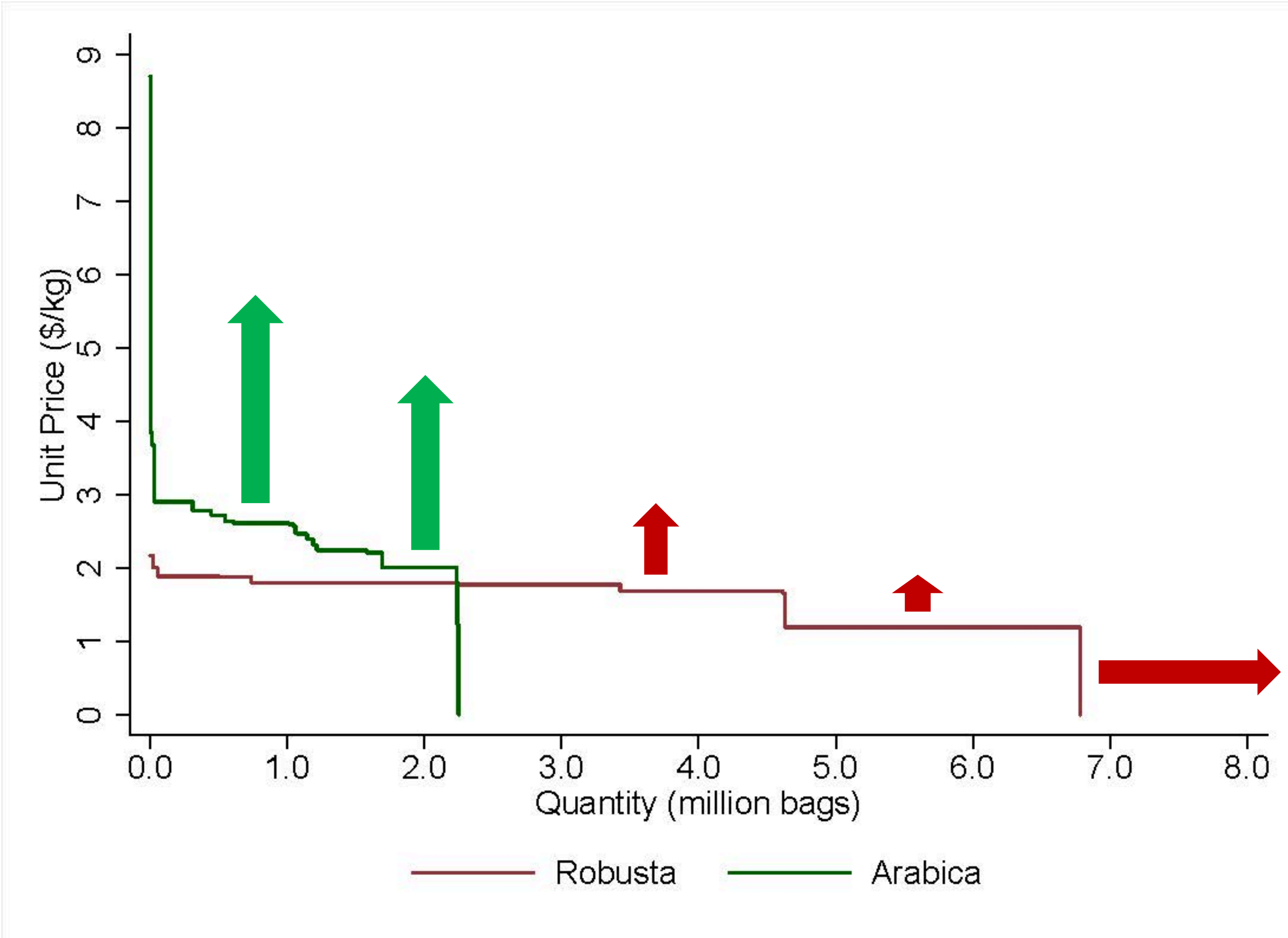
Uganda's Price Curves: Upgrade and Quantity

*Arabica and Robusta varieties 2017/18**



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Quality Upgrading & Contract Enforcement in Supply Chain
Field notes

What are the constraints to exporting high quality coffee out of Uganda?

Diagnosis of supply chain reveals challenges at:

1. Farm gate
2. Export gate [hulling/exporter/UCDA]

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Quality Upgrading & Contract Enforcement in Supply Chain

Field notes: Farm Gate

Farmers face immediate cash needs before harvest and, as a result, often forward sell their coffee cherries several months before harvest to traders.

These traders, fearful that farmers will not honor this contract, arrive to harvest early, before farmers can side sell to others, often to the detriment of cherry quality.

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Stakeholder interviews suggest that close to 60% of coffee trees are being sold in forward contracts. With such a large magnitude of coffee cherries potentially subject to premature harvest and damage, this may be a major factor depressing the supply of high-quality cherries eventually available to exporters.

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[Farmers also have no longer incentive to tend to their trees (the "fruit" is not theirs anymore) implies no soil conservation, no pruning…

Future consequences on yield and quality: traders are not farmers they intensely strip trees which implies following harvest yields are worse]

Quality Upgrading & Contract Enforcement in Supply Chain
Field notes: Farm Gate

Farmers are not rewarded to produce high-quality beans. Prima facie this seems puzzling as the "premium" over low quality should incentivize high-quality production. However discussions with farmers suggest that they are not receiving a sufficient price premium.

As one farmer put it: *"Why should I invest in producing high quality when there is always someone there to buy low quality?"*

The answer to this should be that one can receive a higher price for producing higher quality, but it seems the price differences that farmers experience is not large enough to encourage them to exert effort to produce high-quality cherries.

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The answer to this should be that one can receive a higher price for producing higher quality, but it seems the price differences that farmers experience is not large enough to encourage them to exert effort to produce high-quality cherries.

One hypothesis, as suggested by the farmer quoted above, is that although there is an abundance of traders willing to buy low-quality beans, there are not enough traders active in high-quality buying. Limited access to working capital or other constraints limit traders from engaging in high-quality buying. The result may be that stronger competition among low-quality buyers artificially raises the price offered to farmers for low-quality beans (relative to high-quality).

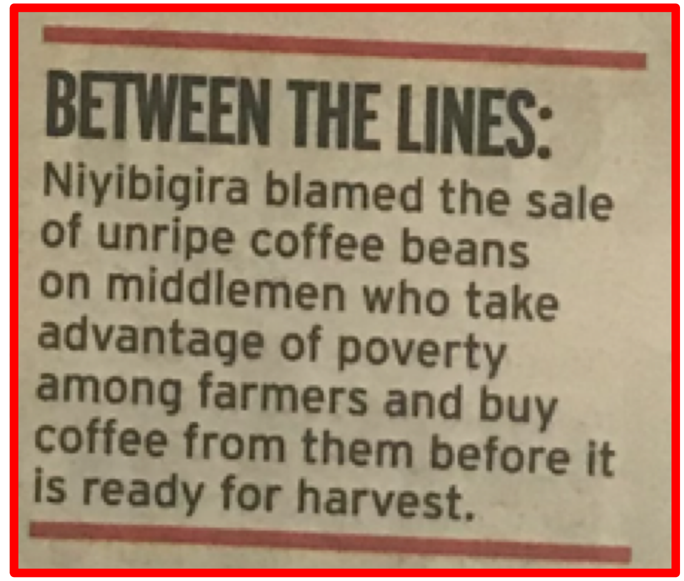
Quality Upgrading & Contract Enforcement in Supply Chain

Farm Gate: solutions to Test with Exporter (s) and UCDA

To address the problem of:	Test the solution of:
• Lack of farmer working capital	• Offer harvest-time loans to farmers to encourage farmers to wait to harvest coffee trees until mature
• Lack of contract enforcement	• Mechanisms for enforcing contracts: involvement of LC1 courts (formal), involvement of binding arbitration (informal), contract rubber stamped with official government seal , blockchain technology
• Price premiums too small to encourage farmers to produce high quality	• Offer greater price premiums for high quality to traders (and see how much gets passed on to farmers) vs. directly to farmers (via exporter)
• Too little competition among high quality buyers	• Offer working capital to potential high quality buyers to encourage entry and greater competition

Quality Upgrading & Contract Enforcement in Supply Chain

Farm Gate: Policy Response



1. Current rules and regulation (*The Coffee Regulations 1994)* does not cover farm gate
2. Limited capacity of UCDA to monitor and enforce at farm gate (circa 50 extension workers for the whole country)

Quality Upgrading & Contract Enforcement in Supply Chain
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Quality Upgrading & Contract Enforcement in Supply Chain
Field notes

2. Export gate, "facts":

	Export Regulation
Moisture	**11-12%**
Defects	
Robusta	**10%**
Arabica Washed	**10%**
Arabica Unwashed (DRUGAR)	**10%**

Quality Upgrading & Contract Enforcement in Supply Chain

Field notes

2. Export gate, "facts":

	Export Regulation	Often Exported
Moisture	**11-12%**	**15%**
Defects		
Robusta	**10%**	**20%**
Arabica Washed	**10%**	**10%**
Arabica Unwashed (DRUGAR)	**10%**	**30%**

Quality Upgrading & Contract Enforcement in Supply Chain
Field notes

2. Export gate [hulling/exporter/UCDA]

Farmer level: monitoring defects would be involving – counting defects and flotation tests; **challenging to fix** [gold standard Costa Rica]

Quality Upgrading & Contract Enforcement in Supply Chain

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Trader/Hulling level: traders arriving with *kiboko* and selling *FAQ*, don't have moisture meters, so push low prices to farmers – monitoring and enforcement at this level is **challenging to fix**, many micro-hullers and traders – unless license + certify the traders and hullers, training on quality standards should be part of the process

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Exporter/UCDA level:

- when exporters purchase from traders a *Form-5* is issued by UCDA officer, **enforceability of standards is weak**
- when exporters export a export certificate needs to be issued that the coffee is export standard, **enforceability of standards is weak** due to limited incentives to reject export coffee (need volumes!) and **GOVERNANCE**
- **Here an opportunity: exporters are small in numbers, consistent and uniform adherence to export standards by UCDA will ripple through the supply chain and intermediaries will react but need capacity at UCDA**

Thank You
Feedback Welcome

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