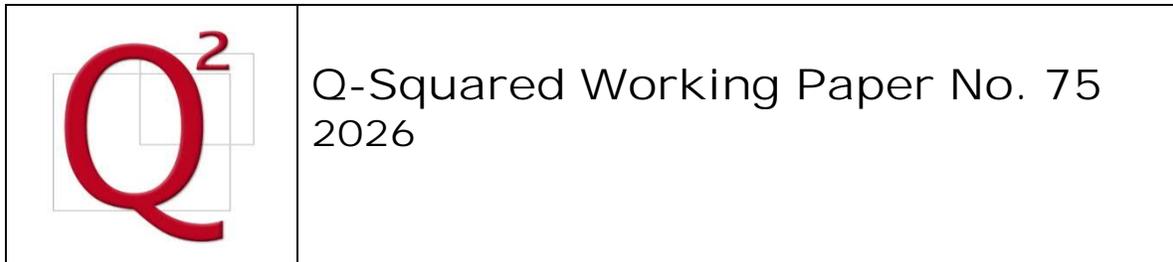


# Inclusive Service Sector-led Growth (ISSG): Exploratory Econometrics

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## Abstract

*The Inclusive Service Sector-led Growth (ISSG) research program seeks to identify and explain successful and unsuccessful experiences in achieving productivity-augmenting, labour-absorbing and poverty-reducing service sector growth. An initial stage in the research process, outlined in this paper, is to identify characteristics of ISSG by estimating sectoral growth elasticities of poverty disaggregated by region and income-level. The objective is to uncover conditional associations between changes in poverty and sectoral growth which are robust to different model specifications with a view to generate hypotheses for further investigation.*



## Contents

1. Introduction.....	1
2. The Sectoral Composition of Growth Framework .....	1
3. Estimation and Specification.....	4
4. Data.....	5
5 Results .....	6
5.1 The Bare Bones (BB) Model.....	6
5.1.1 Results .....	6
5.1.2 Results by Region .....	7
5.1.3 Results by Income Level .....	9
5.1.4 Robustness Checks.....	11
i. Overall Results.....	12
ii. Results by Region .....	12
iii. Results by Income Level.....	12
5.1.5 Summary .....	13
5.2 The Expanded Service Sector (ESS) Model.....	14
5.2.1 Results .....	14
5.2.2 Results by Region .....	15
5.2.3 Results by Income Level .....	18
5.2.4 Robustness Checks.....	21
i. Overall Results.....	21
ii. Results by Region .....	21
iii. Results by Income Level.....	22
5.2.5 Summary .....	22
6. Summary & Conclusion.....	24
References.....	26
Appendix Tables .....	28
A.1 Bare Bones Model .....	28
A.2 Extended Service Sector Model.....	43

## Tables

Table 1 Models Estimated .....	4
Table 2 BB Model: Sectoral Growth (semi-) Elasticities of Poverty .....	6
Table 3 BB Model: Sectoral Growth (semi-)Elasticities of Poverty by Region (Base=EAP).....	8
Table 4 BB Model: Pair-wise Differences in Sectoral Growth (semi-)Elasticities of Poverty by Region, Service Sector (Wald test, p values).....	9
Table 5 BB Model: Sectoral Growth (semi-)Elasticities of Poverty by Income Level .....	10
Table 6 BB Model: Pair-wise Differences in Sectoral Growth (semi-)Elasticities of Poverty by Income- level, Service Sector (Wald test, p values).....	11
Table 7 BB Model: Robustness Results .....	11
Table 8 ESS Model: Sectoral Growth (semi-) Elasticities of Poverty.....	14
Table 9 ESS Model: Sectoral Growth (semi-)Elasticities of Poverty by Region.....	16
Table 10 ESS Model: Pair-wise Differences in Sectoral Growth (semi-)Elasticities of Poverty by Region, Service Sub-sectors (Wald test, p values).....	17
Table 11 ESS Model: Sectoral Growth (semi-)Elasticities of Poverty by Income-level.....	19
Table 12 ESS Model: Pair-wise Differences in Sectoral Growth (semi-)Elasticities of Poverty by Income- level, Service Sub-sectors (Wald test, p values).....	20
Table 13 ESS Model: Robustness Results.....	21
Table 14 Sectoral Growth Elasticities of Poverty Key Results.....	24

## Appendix Tables

Appendix Table 1 BB Model: Diagnostics .....	28
Appendix Table 2 BB Model: SGEP Lagged Variables.....	29
Appendix Table 3 BB Model: SGEP Time Dummy .....	30
Appendix Table 4 BB Model: Sector*Region Interactions (base = EAP).....	31
Appendix Table 5 BB Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Agriculture and Industry (Wald test, p values) .....	32
Appendix Table 6 BB Model: SGEP by Region, Lagged Variables (Base=EAP).....	33
Appendix Table 7 BB Model, Pairwise SGEP Comparisons by Region, Lagged Variables (Wald test, p values).....	34
Appendix Table 8 BB Model: SGEP by Region, Time Dummy (Base=EAP) .....	35
Appendix Table 9 BB Model, Pair-wise SGEP Comparisons by Region, Time Dummy (Wald test, p values).....	36
Appendix Table 10 BB Model: Sector*Income-level Interactions (base = UMC) .....	37
Appendix Table 11 BB Model: Pairwise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-Level, Agriculture and Industry (Wald test, p values) .....	38
Appendix Table 12 BB Model: SGEP by Income Level, Lagged Variables (Base=UMC) .....	39
Appendix Table 13 BB Model: Pairwise SGEP Comparisons by Income Level, Lagged Variables (Wald test, p values).....	40
Appendix Table 14 BB Model: SGEP by Income Level, Time Dummy Variables (Base=UMC).....	41
Appendix Table 15 BB Model: Pairwise SGEP Comparisons by Income Level, Time Dummy Variables (Wald test, p values).....	42
Appendix Table 16 ESS Model: Diagnostics.....	43
Appendix Table 17 ESS Model: SGEP Lagged Variables .....	44
Appendix Table 18 ESS Model: SGEP Time Dummy Variable.....	45
Appendix Table 19 ESS Model: Sector*Region Interactions (base = EAP) .....	46
Appendix Table 20 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Agriculture and Industry (Wald test, p values).....	47
Appendix Table 21 ESS Model: SGEP by Region, Lagged Variables.....	48
Appendix Table 22 Pairwise SGEP Comparisons by Region, Lagged Variables (Wald test, p values) ....	49
Appendix Table 23 ESS Model: SGEP by Region, Time Dummy Variables .....	50
Appendix Table 24 Pairwise SGEP Comparisons by Region, Time Dummy Variables (Wald test, p values).....	51
Appendix Table 25 ESS Model: Sector*Income-level Interactions (base = UMC).....	52
Appendix Table 26 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-Level, Agriculture and Industry (Wald test, p values) .....	53
Appendix Table 27 ESS Model: SGEP by Income-Level, Lagged Variables .....	54
Appendix Table 28 ESS Model: Pairwise SGEP Comparisons by Income-level, Lagged Variables .....	55
Appendix Table 29 ESS Model: SGEP by Income-level, Time Dummy Variables .....	56
Appendix Table 30 ESS Model: Pairwise SGEP Comparisons by Income Level, Time Dummy Variables .....	57

## 1. Introduction

The Inclusive Service Sector-led Growth (ISSG) research program is about identifying and explaining successful and unsuccessful experiences in achieving productivity-augmenting, labour-absorbing and poverty-reducing service sector growth. The companion *Q-Squared Working Paper 73* (Shaffer 2024–25), presented evidence in support of the two main stylised facts which have motivated the research program, namely: i) the main absorber of labour in low and middle income countries in the Global South is the service sector and ii) most service sector jobs have low value-added. The subsequent *Q-Squared Working Paper 74* (Shaffer 2025) presented a methodology for country spell case study selection, relying on so-called Leave One Country Spell Out (LOCSO) cross-country regressions, and proceeded to select candidate country spells and situate them within a typology based on stages of the structural transformation of the economy.

The present working paper conducts further cross-country econometric analysis to identify characteristics of ISSG by estimating sectoral growth elasticities of poverty disaggregated by region and income-level. The objective is to uncover conditional associations between changes in poverty and sectoral growth which are robust to different model specifications. It is a reduced-form modelling exercise which *makes no causal claims*, despite the fact that, at times, the language could be (mis)interpreted causally (for example, ‘*sector j is poverty-reducing*’).<sup>1</sup> It represents a preliminary attempt to ‘shake the econometric bush’ and see if robust conditional associations emerge. Such associations may be the subject of future investigation in the research program.

The format is as follows: Section 2 presents the sectoral composition of growth framework which informs the modelling approach. Sections 3 and 4 discuss estimation and specification issues and data, respectively. Section 5 presents results while section 6 concludes with a discussion of the strongest findings to emerge.

## 2. The Sectoral Composition of Growth Framework

There have been a number of recent initiatives decomposing growth in countries of the Global South into its sectoral components (de Vries, Timmer and de Vries, 2015; Rodrik, McMillan and Sepúlveda, 2016). Sectoral decompositions of growth have also been recently applied to analyses of poverty reduction (Benfica and Henderson (B/H), 2021; Erumban and de Vries 2024), which themselves follow in the tradition of Ravallion and Datt (1996), Christensen et al. (2011) and others.

The present analysis differs in that it is *not* an additive decomposition of poverty. Instead, it presents partial conditional Sectoral Growth Elasticities of Poverty (SGEPs). Changes in poverty are regressed on changes in sectoral growth per capita. The sectoral terms in the regressions are not weighted by their sectoral value-added share and consequently, do not add up to total growth. Nevertheless, the approach does respond to the core ISSG research question about the nature of the relationship between sectoral growth and changes in poverty.

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<sup>1</sup> As such, it shares the scepticism about the ability of cross-country regressions to make valid and useful causal claims, in light of the vast heterogeneity of country experience and the multiple sources of possible endogeneity which are only partially addressed, at best (see Durlauf (2009), Rodrik (2012) and Ferreira et al. (2018)).

The conceptual building block of our approach is a growth (semi) elasticity of poverty of the form:

$$\Delta P_{it} = \alpha_i + \beta_{it} \Delta Y_{it} + \varepsilon_{it} \quad (1)$$

where  $\Delta$  is a change operator,  $P$  and  $Y$  represent (the annualized change in) poverty and GDP per capita respectively for country  $i$  at time  $t$ ,  $\alpha$  is the country-specific intercept, and  $\varepsilon$  is a country and time-specific error term. To clarify, the time subscript,  $t$ , represents the endpoint of the poverty spell, ( $t - (t-1)$ ). The coefficient  $\beta$  is either the growth elasticity of poverty (GEP) - the percentage change in poverty associated with a one percent change in GDP per capita - or the growth semi-elasticity of poverty - the percentage point change in poverty associated with a one percent change in GDP per capita.

### ***The Bare Bones (BB) and Expanded Service Sector (ESS) Models***

We begin by disaggregating GDP per capita growth into its sectoral components, or subcomponents, so that the poverty-growth relationship may vary by sector. The starting point is the identity in equation (2):

$$Y = \sum_{j \in \{a,i,(s|\mathcal{S})\}} Y_j \quad (2)$$

where  $Y_j$  represents value-added per capita in sector  $j$ . In the bare bones model,  $j$  is comprised of agriculture,  $a$ , industry,  $i$ , and services  $s$ . In the expanded service sector model, services are disaggregated into  $\mathcal{S}$  which comprises trade, transport, business and other (finance, real estate, government and other services). Section 3 provides a rationale for grouping  $\mathcal{S}$  in this way.

Replacing aggregate growth in equation (1) with its sectoral components, incorporating log differences and adding subscripts yields the main estimating equation used in sections 5.1 and 5.2:

$$\Delta \ln P_{it} = \alpha_i + \sum_{j \in \{a,i,(s|\mathcal{S})\}} \beta_j \Delta \ln Y_{jit} + \varepsilon_{it} \quad (3)$$

In equation (3),  $\beta_j$  may be interpreted as the sectoral growth (semi-) elasticity of poverty, conditional on growth in other sectors. As mentioned, sectoral growth is *not* weighted by its value-added shares and consequently, does not sum to total growth.

### ***Region and Income-level Disaggregation***

To account for possible heterogeneity, the sectoral growth variables are interacted with region or income-level dummy variables to yield<sup>2</sup>:

$$\Delta \ln P_{it} = \alpha_i + \sum_{j \in \{a,i,(s|\mathcal{S})\}} \beta_{jbase} \Delta \ln Y_{jit} + \sum_{g \in \{R/I\}} \sum_{j \in \{a,i,(s|\mathcal{S})\}} \delta_{jg} (D_{ig} \cdot \Delta \ln Y_{jit}) + \varepsilon_{it} \quad (4)$$

<sup>2</sup> There is an additional term for the region/income-level-specific intercepts which is omitted as it is not considered in the analysis.

where *base* is the base used in the construction of the region and income-level dummy variables, *g* comprises the *non-base* groups for region (*R*) or income-level (*I*), *D* is a dummy variable which take the value of 1 for country *i* in region *R*, or in income-level *I*, and 0 otherwise (section 3 provides a discussion of the base groups used). Sectoral growth (semi-)elasticities of poverty for base and non-base groups are represented by  $\beta_{jbase}$  and  $(\beta_{jbase} + \delta_{jg})$ , respectively. To be clear, SGEPs for the non-base groups combine the slopes of the base and the interaction terms. P-values of Wald tests are presented for pairwise and joint differences of sectoral growth elasticities of poverty for regional and income-level groups.

### ***Endogeneity and Robustness Checks***

In our modelling framework, biases due to simultaneity (reverse causation) and omitted variables, may be particularly severe. The first could arise from economic forces, such as urban migration, or due to policy intervention, if policy makers respond to disappointing poverty outcomes with policies to spur sectoral growth, for example. The second may occur if shocks, related to rainfall, international economic conditions, and so on, jointly affect sectoral growth and poverty outcomes.

To assess possible simultaneity bias, equation (4) is re-estimated using the lagged values of the sectoral (log difference) variables as per:

$$\Delta \ln P_{it} = \alpha_i + \sum_{j \in \{a,i,(s|\mathcal{S})\}} \beta_{jbase} \Delta \ln Y_{jit-1} + \sum_{g \in \{R|I\}} \sum_{j \in \{a,i,(s|\mathcal{S})\}} \delta_{jg} (D_{ig} \cdot \Delta \ln Y_{jit-1}) + \varepsilon_{it} \quad (5)$$

To assess potential omitted variable bias, a time dummy variable,  $\lambda_{t-1}$  is introduced yielding:

$$\Delta \ln P_{it} = \alpha_i + \sum_{j \in \{a,i,(s|\mathcal{S})\}} \beta_{jbase} \Delta \ln Y_{jit} + \sum_{g \in \{R|I\}} \sum_{j \in \{a,i,(s|\mathcal{S})\}} \delta_{jg} (D_{ig} \cdot \Delta \ln Y_{jit}) + \lambda_{t-1} + \varepsilon_{it} \quad (6)$$

where *t-1* represents the start date of spell *t* (which is also the end-date of spell *t-1*).

### 3. Estimation and Specification

Twelve different models are estimated based on the poverty measure used. Poverty is specified as either the (percentage point) change in poverty incidence or the (percentage) change in consumption expenditure/income of the bottom 20 and 40 percent. For poverty incidence, poverty lines of \$3.00/day, \$4.20/day and \$8.30/day in 2021 Purchasing Power Parity (PPP) terms are used (Foster et al., 2025), which arguably represent appropriate (updated) extreme poverty thresholds in low, lower-middle and upper-middle income countries, respectively (Jolliffe and Prydz, 2016). A fourth hybrid poverty line also appears which assigns these poverty lines to a country's corresponding income status. Three-year and five-year poverty spells were used for all variants of these poverty definitions. Table 1 shows the breakdown of models by poverty measure, line and spell along with the number of observations for each model.

Table 1 Models Estimated

	Poverty Measure		Poverty Line				Poverty Spell		N
	Incidence	Inc/Con Growth	\$3.00 /day	\$4.20 /day	\$8.30 /day	Hybrid	3 Year	5 Year	
Dlnp0spl3yr30	✓		✓				✓		143
Dlnp0spl3yr42	✓			✓			✓		148
Dlnp0spl3yr83	✓				✓		✓		151
Dlnp0splfyr30	✓		✓					✓	92
Dlnp0splfyr42	✓			✓				✓	96
Dlnp0splfyr83	✓				✓			✓	98
Dlnp0hybspl3yr	✓					✓	✓		151
Dlnp0hybsplfyr	✓					✓		✓	98
Dlnq2spl3yr83		✓					✓		151
Dlnq2splfyr83		✓						✓	98
Dlnq4spl3yr83		✓					✓		151
Dlnq4splfyr83		✓						✓	98

Variables are annualised differences over spells. Dln=log differences; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.

The models are estimated using either pooled OLS, random or fixed effects with robust standard errors clustered by country. The decision rule for the estimation approach used involved two stages. First, pooled OLS was retained if the Breusch-Pagan Lagrange Multiplier (BPLM) test did not reject, at the 5% level, the nul hypothesis of zero country-level (unit) variance (Baltagi 2005, ch.4). Second, fixed effects were selected if the Arellano-Wooldridge (AW) procedure rejected, at the 5% level, the nul of zero correlation between the country-specific error terms and the regressors in the random effects model.<sup>3</sup>

For the core models, diagnostic tests were performed to assess the extent of collinearity of the regressors and sensitivity to outliers (see Appendix Tables). Collinearity was assessed by computing Variance

<sup>3</sup> The Arellano-Wooldridge (AW) approach is a version of the standard Hausman test which is robust to heteroskedasticity. It applies in our case given the clustering of standard errors by country. AW uses an artificial regression procedure which supplements the regressors in the original random effects model with the same regressors expressed in deviations-from-mean form (i.e. they represent country-spell specific deviations from country-specific means). It estimates a Wald test of the joint significance of these added regressors. In this sense, it amounts to an overidentification test of the random effects model. An intuitive explanation is provided in Schaffer et al. (2010) and a formal treatment is found in Wooldridge (2010: 328-344).

Inflation Factors (VIFs) from regressions of each right-hand side variable on the other two. For the RE or FE models the variables were demeaned by country to assess the within component of variation in the panel estimation. Outliers were assessed using Stata's `rreg` command which excludes, or assigns lower weights, to high residual observations.<sup>4</sup> As with the VIF estimation, The RE and FE models were within (country) demeaned.

As discussed in section 2, the regressions specified in equation (4) included dummy variables for region and income level which were interacted with the regressors to generate the SGEP coefficients for the non-base dummy variable terms. The regional disaggregation used East Asia and the Pacific (EAP) as the base category and included Latin America and the Caribbean (LAC), South Asia (SAS) and Sub-Saharan Africa (SSA) (sample size is slightly lower as other regions were excluded). The income-level regressions are based on the World Bank's income level categories in the World Development Indicators database. We used the Upper-Middle (UMC) income group as the base category and included Lower-Middle (LMC) and Low-Income categories (LIC).

## 4. Data

The poverty data are from the World Bank's Poverty and Inequality Platform database (<https://pip.worldbank.org/home>). The data reflect the recent adjustments to the income and consumption measures, and poverty lines, based on 2021 Purchasing Power Parity (PPP) conversion rates (Foster et al. 2025). The sample was restricted to poverty spells in low- and middle-income countries of the Global South between 1990 and 2018. Country-spells were excluded if poverty incidence fell below 1%. Accordingly, the sample size increases from the lowest to highest poverty lines used. The hybrid poverty lines (hyb) and the income/consumption growth of the bottom 20% and 40% (q2/4) used the sample corresponding to the \$8.30/day poverty line (see Table 1). The complete listing of all country poverty spells for all poverty measures along with descriptive statistics on poverty are provided in Appendix in the companion *Q-Squared Working Paper 74* (Shaffer 2025).

The data on sectoral value-added are from the Groningen Growth and Development Centre/World Institute for Development Economics Research (GGDC/WIDER) Economic Transformation Database (ETD). As of 2026, data coverage was from 1990 to 2018 corresponding to the time period of our sample. Additional information on the database is provided by de Vries et al. (2021) and related discussion is in the companion *Q-Squared Working Paper 73* (Shaffer 2024-25). Data on population required for the per capita information were sourced from the World Bank's World Development Indicators database (<https://databank.worldbank.org/source/world-development-indicators>).

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<sup>4</sup> Specifically, it first excludes large outliers with Cook distance values greater than 1, and then iteratively reweights remaining observations until they fall within a tolerance threshold (Statacorp 2017a, 2480-3).

## 5 Results

### 5.1 The Bare Bones (BB) Model

The bare bones model regresses changes in poverty on changes in value-added per capita of agriculture, industry and services. It estimates equation (3) in section 2, where  $j \in \{a, i, s\}$ . Full model results are presented in section 5.1.1 and the disaggregation by region and income level are presented in sections 5.1.2 and 5.1.3, respectively. Section 5.1.4 presents results of the robustness checks for possible endogeneity, while section 5.1.5 summarises.

#### 5.1.1 Results

Table 2 presents the sectoral growth (semi-) elasticities of poverty along with the estimation approach and selection statistics (BPLM, AW) for the 12 model specifications discussed in section 3. Model diagnostics, discussed in section 3 and presented in Appendix Table 1, suggest that collinearity is within reasonable bounds though there are a number of potential sign flips on the coefficients due to outliers (bolded in Table 2 and Appendix Table 1).

Table 2 BB Model: Sectoral Growth (semi-) Elasticities of Poverty

	Model	Ag	Ind	Ser	BPLM (p)	AW (p)	Wald (p)	r2	N
Dlnp0spl3yr30	FE	0.253	-0.179	-0.316	0.016	0.047	0.624	0.034	143
Dlnp0spl3yr42	FE	-0.058	-0.095	-0.290	0.000	0.021	0.804	0.051	148
Dlnp0spl3yr83	FE	0.233	-0.134*	-0.187	0.000	0.013	0.243	0.072	151
Dlnp0splfyr30	OLS	-0.477	-0.015	-0.377	0.140	0.290	0.386	0.066	92
Dlnp0splfyr42	RE	-0.364*	0.185	-0.582**	0.000	0.296	0.052	0.078	96
Dlnp0splfyr83	RE	0.004	0.141	-0.363**	0.000	0.277	0.109	0.036	98
Dlnp0hybspl3yr	FE	0.275	-0.106	-0.163	0.000	0.006	0.381	0.038	151
Dlnp0hybsplfyr	RE	-0.231	0.210	-0.466**	0.001	0.107	0.155	0.074	98
Dlnq2spl3yr83	OLS	0.329	0.013	0.163	0.423	0.005	0.486	0.049	151
Dlnq2splfyr83	OLS	0.293	-0.041	0.266	0.219	0.099	0.304	0.061	98
Dlnq4spl3yr83	OLS	0.307	0.005	0.220	0.407	0.009	0.481	0.075	151
Dlnq4splfyr83	OLS	0.249	-0.033	0.314*	0.303	0.182	0.261	0.085	98

Variables are annualised differences over spells. Dln=log differences; p0=poverty incidence; spl 3yr/fyr=spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded items represent possible sign flips due to outliers (see Appendix Table 1)

There are four key findings. First, few sectoral variables (3 of 36) are statistically significant at conventional levels and the Wald test cannot reject coefficient equality in any model at the 5% level of significance. Second, the only statistically significant coefficients, at the 5% level, are found in the service sector (3 of 12). Third, all of the service sector coefficients have the expected poverty-reducing signs, which contrasts with agriculture (9 of 12 including potential sign flips due to outliers) and industry (8 of 12). Fourth, generally the sectoral growth variables explain a small proportion of the total variance in poverty as reflected in low r2 values.

### 5.1.2 Results by Region

Table 3 presents the sectoral growth elasticities of poverty disaggregated by region. To recall from section 2, a regression was run with sector\*region interaction terms whose coefficients were used to calculate the slopes of all but the base dummy variable (East Asian and the Pacific (EAP)). The full interaction model results are presented in Appendix Table 4.

Table 3 shows that there are few statistically significant results at the 5% level (4 of 48) in the service sector, though all models from EAP and Sub-Saharan Africa are signed as poverty-reducing (though only 2 are statistically significant at the 5% level). Conversely, the opposite pattern holds for Latin America and the Caribbean, where *all* coefficients are poverty-increasing (2 of which are statistically significant at the 5% level). In agriculture, the pattern is poverty-reducing in South Asia (in 11 of 12 models) and Sub-Saharan Africa (in 10 of 12 models), but not statistically significant. The effects of industry are poverty-reducing in Latin America in all models, and statistically significant at the 5% level in 11 of 12.

To probe these findings, we assess the statistical significance of differences between regions in two ways. First, p-values of joint Wald tests of coefficient equality across regions are presented in Table 3 for services and in Appendix Table 4 for all regions (the nul hypothesis is that all coefficients are equal). Second, p-values of pairwise Wald tests within regions are presented for services in Table 4 and for agriculture and industry in Appendix Table 5. The nul hypothesis, once again, is equality of coefficients.

Within the service sector, the joint Wald test rejects coefficient equality in only one of 12 models. Further, only 8 of the 72 pairwise comparisons in the service sector in Table 4 are statistically significant, most involving comparisons between EAP and other regions. A broadly similar pattern holds for agriculture, where only 2 of 12 models reject the joint nul of coefficient equality and only 5 of 72 pairwise differences are statistically significant at the 5% level. By contrast, many differences within industry are statistically significant. We can reject the joint Wald test of coefficient equality in 8 of 12 models. In addition, as shown in Appendix Table 5, there are strong statistically significant pairwise differences between Latin America and the other three regions (34 of 36 of such differences are statistically significant at the 5% level).

Table 3 BB Model: Sectoral Growth (semi-)Elasticities of Poverty by Region (Base=EAP)

Model	Agriculture				Industry				Services				Wald (p)	BPLM (p)	AW (p)	r2	N
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA					
Dlnp0spl3yr30 OLS	-1.997***	-0.345	-1.126*	-0.203	0.554	-2.375***	0.375	0.187**	-0.423	0.782	0.529	-0.406	0.271	0.170	n/a	0.356	131
Dlnp0spl3yr42 RE	-1.235***	0.191	-0.058	-0.303	0.637***	-1.746***	0.054	0.063	-0.805***	0.596	0.239	-0.196	0.007	0.000	0.607	0.364	134
Dlnp0spl3yr83 RE	0.065	0.022	0.094	-0.086	0.281***	-0.918***	0.071	0.040	-0.338**	0.201	-0.261	-0.097	0.259	0.000	0.547	0.306	137
Dlnp0splfyr30 OLS	0.223	-0.725	-1.835*	-0.036	-0.061	-2.118**	0.523	0.173**	-0.628	0.875	0.191	-0.379	0.474	0.449	n/a	0.306	83
Dlnp0splfyr42 RE	-0.335	-0.229	-0.905	-0.202	0.680***	-1.962**	0.165	0.095	-0.782	0.925	0.018	-0.135	0.399	0.008	0.991	0.300	85
Dlnp0splfyr83 RE	0.563	-0.071	-0.394	0.001	0.646	-1.156**	0.216*	0.060**	-0.462	0.415	-0.363	-0.089	0.338	0.004	0.981	0.362	87
Dlnp0hybspl3yr RE	0.028	0.184	-0.219	-0.055	0.270*	-1.265***	0.140	0.025	-0.424*	0.493	0.101	-0.169	0.291	0.000	0.711	0.241	137
Dlnp0hybsplfyr RE	0.345	0.153	-1.167	0.022	0.657*	-1.441*	0.391	0.035	-0.577	0.644	-0.302	-0.222	0.497	0.046	0.956	0.297	87
Dlnq2spl3yr83 OLS	0.632***	0.181	0.860	0.009	-0.061	1.934***	-0.054	-0.199	0.077	-0.985**	-0.935	0.624	0.064	1.000	n/a	0.303	137
Dlnq2splfyr83 OLS	0.274	0.567	1.350	0.065	-0.355	1.807**	-0.344	-0.021	0.707	-0.938	-0.968*	0.253	0.069	1.000	n/a	0.239	87
Dlnq4spl3yr83 OLS	0.631***	0.183	0.715	0.098	-0.026	1.482***	-0.036	-0.190	0.101	-0.672**	-0.821	0.576	0.080	0.236	n/a	0.292	137
Dlnq4splfyr83 OLS	0.260	0.418	1.258	0.099	-0.291	1.486**	-0.292	-0.032	0.720*	-0.766	-0.886*	0.285	0.056	0.123	n/a	0.243	87

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa

Table 4 BB Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Service Sector (Wald test, p values)

	Services					
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA
Dlnp0spl3yr30	0.176	0.413	0.982	0.818	0.074	0.350
Dlnp0spl3yr42	0.021	0.031	0.048	0.636	0.227	0.426
Dlnp0spl3yr83	0.089	0.806	0.126	0.250	0.318	0.575
Dlnp0splfyr30	0.292	0.632	0.840	0.637	0.136	0.652
Dlnp0splfyr42	0.091	0.377	0.297	0.409	0.227	0.839
Dlnp0splfyr83	0.140	0.840	0.392	0.108	0.243	0.305
Dlnp0hybspl3yr	0.061	0.393	0.516	0.575	0.199	0.671
Dlnp0hybsplfyr	0.129	0.762	0.494	0.341	0.186	0.918
Dlnq2spl3yr83	0.054	0.205	0.333	0.953	0.018	0.081
Dlnq2splfyr83	0.054	0.023	0.482	0.974	0.165	0.102
Dlnq4spl3yr83	0.080	0.211	0.357	0.842	0.025	0.086
Dlnq4splfyr83	0.045	0.019	0.467	0.877	0.156	0.086

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent  $p < 0.05$ .

### 5.1.3 Results by Income Level

Table 5 presents the sectoral growth elasticities of poverty disaggregated by income-level. To recall from section 3, the income-level groups distinguish upper-middle (UMC) income, lower-middle income (LMC) and low-income categories (LIC) drawing on the World Bank's classification. The full interaction model results used to calculate the slope values of the non-base dummy variable categories in Table 5 are presented in Appendix Table 10.

Table 5 reveals only one statistically significant result at the 5% level in the service sector, though all LIC and LMC models are signed as poverty-reducing. In agriculture, the pattern is poverty-reducing in all LMC models (four of which are statistically significant at the 5% level) and in 10 of 12 UMC models (three of which are statistically significant at the 5% level). The opposite pattern holds for LICs where 10 of 12 models are poverty-reducing, three of which are statistically significant at the 5% level. These results differ from those in the broader literature (Christiaensen and Martin, 2018) and require further investigation. For industry, results are all signed as poverty-reducing for all UMC models, three of which are statistically significant at the 5% level.

In terms of the statistical significance of the intergroup differences, Appendix Table 10 reveals that the joint Wald test of coefficient equality cannot be rejected in services and industry (in all but one case), however it is rejected in 7 of 12 models in agriculture. The pairwise comparisons in Table 6 and Appendix Table 11 reveal few or no statistically significant differences in the service sector and industry but statistically significant differences in agriculture between LICs and the other groups in 15 of 24 models.

Table 5 BB Model: Sectoral Growth (semi-)Elasticities of Poverty by Income Level

Model	Agriculture			Industry			Services			Ser Wald (p)	BPLM (p)	AW (p)	r2	N
	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC					
Dlnp0spl3yr30 RE	0.223	-0.207	-0.902*	0.049	-0.281	-0.528	-0.076	-0.205	-0.248	0.961	0.048	0.181	0.203	143
Dlnp0spl3yr42 RE	-0.001	-0.306	-0.668***	-0.006	0.045	-0.129	-0.093	-0.368	-0.462*	0.510	0.000	0.329	0.220	148
Dlnp0spl3yr83 RE	-0.022	-0.041	-0.046	-0.003	0.023	-0.201	-0.048*	-0.273	-0.139	0.421	0.000	0.510	0.180	151
Dlnp0splfyr30 OLS	0.548	-0.884***	-0.592	0.016	-0.110	-1.062**	-0.448	-0.299	0.254	0.492	0.467	n/a	0.282	92
Dlnp0splfyr42 RE	0.183	-0.661***	-0.595	-0.013	0.403	-0.369	-0.206	-0.749*	-0.387	0.495	0.013	0.726	0.273	96
Dlnp0splfyr83 RE	0.039	-0.201**	0.069	-0.007	0.168	-0.109	-0.088**	-0.360	-0.208	0.546	0.000	0.918	0.215	98
Dlnp0hybspl3yr RE	0.253	-0.487*	-0.047	0.051*	0.128	-0.201	-0.134	-0.464	-0.138	0.785	0.000	0.084	0.121	151
Dlnp0hybsplfyr RE	0.470	-0.790***	0.072	0.031	0.476	-0.102	-0.315	-0.783	-0.224	0.665	0.002	0.802	0.194	98
Dlnq2spl3yr83 OLS	-1.205***	0.478*	0.567***	0.011	-0.045	0.469**	0.738	0.110	-0.216	0.153	0.459	n/a	0.177	151
Dlnq2splfyr83 OLS	-0.979**	0.542*	0.537**	0.012	0.009	0.186	0.432	0.243	0.181	0.920	0.181	n/a	0.173	98
Dlnq4spl3yr83 OLS	-0.943***	0.447*	0.471***	0.006	-0.071	0.431***	0.654	0.205	-0.131	0.181	0.417	n/a	0.207	151
Dlnq4splfyr83 OLS	-0.751	0.501**	0.391	0.015	-0.017	0.216	0.398	0.328	0.186	0.901	0.177	n/a	0.197	98

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country

Table 6 BB Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-level, Service Sector (Wald test, p values)

	Services		
	LIC-LMC	LIC-UMC	LMC-UMC
Dlnp0spl3yr30	0.891	0.785	0.966
Dlnp0spl3yr42	0.596	0.265	0.867
Dlnp0spl3yr83	0.250	0.506	0.571
Dlnp0splfyr30	0.880	0.237	0.609
Dlnp0splfyr42	0.259	0.578	0.495
Dlnp0splfyr83	0.290	0.744	0.730
Dlnp0hybspl3yr	0.560	0.992	0.489
Dlnp0hybsplfyr	0.433	0.840	0.379
Dlnq2spl3yr83	0.345	0.064	0.491
Dlnq2splfyr83	0.791	0.689	0.894
Dlnq4spl3yr83	0.434	0.090	0.386
Dlnq4splfyr83	0.915	0.719	0.736

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country

### 5.1.4 Robustness Checks

As discussed in section 2, checks are performed for two possible sources of endogeneity which could bias results. Specifically, simultaneity and omitted variable biases are assessed by using the lagged values of the sectoral regressors and by including a time dummy corresponding to the start date of the spell, respectively. Table 7 presents a summary table of results which are subsequently reviewed in turn.

Table 7 BB Model: Robustness Results

	Signed /12	StatSig (5%) /12	Robustness	
			Lag	Time
<b>Bare Bones Model</b>				
1. Overall				
1.1 The Service Sector is Poverty-Reducing	12	3	✓	✓/✗
2. Region				
2.1 The Service Sector is Poverty-Reducing in SSA	12	0	✓	✓
2.2 The Service Sector is Poverty-Reducing in EAP	12	2	✗	✓
2.3 The Service Sector is Poverty- <b>Increasing</b> in LAC	12	2	✗	✓
2.4 Agriculture is Poverty-Reducing in SAS	11	0	✗	✓/✗
2.5 Agriculture is Poverty-Reducing in SSA	10	0	✗	✗
2.6 Industry is Poverty-Reducing in LAC	12	11	✗	✓
2.7 Within industry, statistically sig. differences (LAC vs other)	n/a	34/36	✗	✓

	Signed /12	StatSig (5%) /12	Robustness	
			Lag	Time
3. Income Level				
3.1 The Service Sector is Poverty-Reducing in LICs	12	1	✓	✗
3.2 The Service Sector is Poverty-Reducing in LMCs	12	0	✗	✓
3.3 Agriculture is Poverty- <b>Increasing</b> in LICs	10	3	✗	✓
3.4 Agriculture is Poverty-Reducing in LMCs	12	5	✓	✓
3.5 Agriculture is Poverty-Reducing in UMCs	10	4	✗	✗
3.6 Industry is Poverty-Reducing in UMCs	12	3	✓	✓
3.7 Within agriculture, statistically sig. differences (LIC vs other)	n/a	15/24	✗	✗

*i. Overall Results*

In the lagged regressor models (Appendix Table 2), the service sector is still signed as poverty-reducing in 10 of 12 models though all models lose their statistical significance (sample size is roughly cut by 40%). When introducing a time dummy variable, the service sector is signed as poverty-reducing in 8 of 12 models though poverty-increasing in a statistically significant way, at the 5% level, in one (Appendix Table 3).

*ii. Results by Region*

The original SGEP results are generally sensitive to the use of lagged regressors (Appendix Table 6). For services, SSA is still signed primarily as poverty-reducing though not EAP. Further, LAC is no longer strongly poverty-increasing. Agriculture is no longer poverty-reducing in SAS or SSA. We no longer reject coefficient equality in industry and the strongly poverty-reducing effects in Latin America are significantly attenuated. Accordingly, most of the pairwise comparisons within industry lose significance (Appendix Table 7).

By contrast, the original SGEP results are not sensitive to the use of time dummy variables (Appendix Table 8). Within services, SSA and EAP remain generally signed as poverty-reducing and the opposite pattern holds for LAC. For agriculture, the poverty-reducing effects are partially confirmed in 9 of 12 models in SAS, but not in SSA. The strong statistically significant, poverty-reducing performance of Latin America is replicated as is the rejection of coefficient equality in industry, at the 5% level, in over half the models. The pairwise comparison confirm the strong, statistically significant differences between Latin America and the other regions in industry in most models (Appendix Table 9).

*iii. Results by Income Level*

Around half of the SGEP results by income level are robust when using the lagged regressions (Appendix Table 12). The service sector remains poverty-reducing in LICs but not in LMCs. In agriculture, poverty is no longer increasing in LICs nor is it poverty-reducing in UMCs, though it remains so in LMCs. UMCs remain poverty-reducing in industry. The joint Wald test of coefficient equality as well as the pairwise comparisons in agriculture (Appendix Table 13) lose statistical significance.

When using the time dummy models, around half the original SGEP results are robust (Appendix Table 14). In the service sector, LICs are no longer poverty-reducing yet LMCs remain so (in 10 of 12 models). In agriculture, LMCs remain poverty-reducing in all models and UMCs do not. LICs remain poverty-increasing in 8 of 12 models in agriculture, two of which are statistically significant at the 5% level. In industry, UMCs remain poverty-reducing in all models, four of which are statistically significant at the 5% level.

### 5.1.5 Summary

The Bare Bones (BB) model estimated partial sectoral growth (semi-)elasticities of poverty for agriculture, industry and services. Overall, few results were statistically significant though most had the expected poverty-reducing signs, including all service sector models. These results are generally not sensitive to lagging sectoral variables (though some coefficients lose statistical significance). By contrast, the time dummy regressions attenuate the poverty-reducing results from the service sector.

For the service sector models disaggregated by region, few statistically significant results were found. The strongest poverty-reducing results emerged from EAP and SSA where all coefficients were signed as expected while the opposite patterns held for LAC. Few of the inter-group differences, however, were statistically significant. For agriculture the pattern was poverty-reducing, but not statistically significant, in Sub-Saharan Africa and South Asia. Intergroup differences were not generally found to be statistically significant. By contrast, growth in the industrial sector was strongly poverty-reducing and statistically significant in Latin America but had mixed effects elsewhere. Differences between Latin America and other regions were consistently statistically significant. These results were generally replicated when using the time dummy variables but not when using lagged values of the sectoral variables.

For the service models disaggregated by income-level, few statistically significant results obtained though all models were poverty-reducing for LICs and LMCs. Intergroup differences were not statistically significant in the service sector. In agriculture, many statistically significant, poverty-reducing results were found for LMCs and UMCs but the opposite pattern held in LICs. Further, many of the differences between LICs and the other two groups were statistically significant. For industry, results were all signed as poverty-reducing for UMCs and generally mixed for the other income groups though group differences were not statistically significant. The robustness tests generated mixed results though the poverty-reducing effects of agriculture in UMCs and the statistically significant group differences within agriculture were not replicated.

## 5.2 The Expanded Service Sector (ESS) Model

The ESS model follows the specification of the BB model but services are disaggregated into trade, transport, business and a residual ‘other’ category (comprised of finance, real estate, government and other services<sup>5</sup>). This grouping differs from others in the literature (for example, Erumban and deVries (2024)) and requires a word of explanation.

Inclusive Service Sector Led Growth is about productivity-enhancing, employment-creating and poverty or inequality-reducing service sector growth. Accordingly, the primary focus is on the private sector which explains the assignment of ‘government’ to the residual ‘other’ category. The three largest private sector components of services in terms of employment share are trade, transport and business (Shaffer 2024-25). Because finance and real estate are much smaller and unlikely to be poverty or inequality-reducing, they have also been placed within the residual ‘other’ category.

The format of this section is as follows. Overall results are presented in section 5.2.1 and the disaggregation by region and income level are presented in section 5.2.2 and 5.2.3. Section 5.2.4 presents results of the robustness checks and section 5.2.5 summarises main results.

### 5.2.1 Results

Table 8 presents the sectoral growth elasticities of poverty along with the estimation approach and selection statistics (BPLM, AW) for the 12 model specifications discussed in section 3. Model diagnostics, discussed in section 3 and presented in Appendix Table 16, suggest that collinearity falls within acceptable bounds though there are a number of potential sign flips on the coefficients due to outliers, especially within the business category (bolded in Table 8 and Appendix Table 16).

Table 8 ESS Model: Sectoral Growth (semi-) Elasticities of Poverty

	Model	Ag	Ind	Trd	Trn	Bus	Oth	BPLM (p)	AW (p)	r2	N
Dlnp0spl3yr30	RE	-0.383	-0.159	0.368	-0.199	-0.019	-0.579**	0.020	0.138	0.090	143
Dlnp0spl3yr42	FE	-0.005	-0.029	-0.255	-0.175	0.139**	-0.128	0.000	0.046	0.079	148
Dlnp0spl3yr83	RE	-0.046	0.034	-0.108	-0.035	-0.024	-0.084	0.000	0.069	0.019	151
Dlnp0splfyr30	OLS	-0.450	-0.085	0.393	-0.093	-0.126	-0.452	0.229	0.632	0.095	92
Dlnp0splfyr42	RE	-0.334	0.152	-0.204	0.120	0.015	-0.492*	0.000	0.206	0.080	96
Dlnp0splfyr83	RE	-0.004	0.097	-0.076	0.101	-0.034	-0.278	0.000	0.701	0.036	98
Dlnp0hybspl3yr	FE	0.298	-0.058	-0.163	-0.103	0.013	0.037	0.000	0.032	0.049	151
Dlnp0hybsplfyr	RE	-0.244	0.137	-0.085	0.214	-0.064	-0.407*	0.001	0.313	0.093	98
Dlnq2spl3yr83	OLS	0.310	0.049	-0.146	0.049	-0.005	0.258	0.405	0.055	0.062	151
Dlnq2splfyr83	OLS	0.246	-0.031	-0.216	0.101	-0.011	0.425*	0.206	0.544	0.102	98
Dlnq4spl3yr83	OLS	0.288*	0.026	-0.092	0.089	-0.031	0.273	0.422	0.051	0.091	151
Dlnq4splfyr83	OLS	0.197	-0.027	-0.163	0.097	-0.038	0.465**	0.277	0.661	0.134	98

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day  
Trd=trade; Trn=transport; Bus=business; Oth=other services.  
Bolded items represent possible sign flips due to outliers (see Appendix Table 16)

<sup>5</sup> The ‘other’ services category within the GGDC/WIDER Economic Transformation Database (ETD) is narrower and contains activities such as: arts, entertainment and recreation; activities of households as employers; undifferentiated goods- and service-producing activities of households for own use; activities of extraterritorial organisations and bodies; other service activities) (de Vries et al., 2021, 3).

There are three key findings. First, as with many of the previous models few sectoral variables (3 of 72) are statistically significant at conventional levels. Second, the strongest result is the ‘other’ services sector where all but one coefficient is poverty-reducing and 2 of 12 statistically significant at the 5% level (5 of 10 at the 10% level). Third, 11 of 12 models in agriculture are signed as poverty-reducing and 9 of 12 in transport, though none are statistically significant.

### 5.2.2 Results by Region

As with the format in section 5.1.2, Table 9 presents the (expanded) sectoral growth elasticities of poverty disaggregated by region while Appendix Table 19 presents the full interaction model used to calculate some of the coefficient values presented.

The strongest poverty-reducing results in Table 9 emerge from EAP and SSA for the ‘other’ services category where all coefficients are signed as expected and many are statistically significant (12 of 24 at the 5% level). Second, the opposite patterns holds generally for business across all regions, and strongly for SAS and EAP, where all coefficients are poverty-increasing and 9 of 24 are statistically significant. In agriculture, EAP is poverty-reducing in 9 of 12 models, four of which are statistically significant at the 5% level. Strong poverty-reducing effects of industry are found in Latin America, where all models are poverty-reducing and 6 of 12 statistically significant at the 5% level. By contrast, all models are signed as poverty-reducing in SAS (though none are statistically significant).

As in section 5.1.2, results are presented from joint Wald tests in Table 9 and Appendix Table 19, and pairwise Wald tests in Table 10 and Appendix Table 20 to assess the statistical significance of differences between regions. The joint Wald test rejects regional coefficient equality, at the 5% level, for ‘other’ services (6 of 12 models), to some extent for business (3 of 12 models) and also for industry (6 of 12 models), consistent with Appendix Table 4.

In terms of pairwise comparisons, Table 10 reveals many statistically significant differences within the ‘other’ services category. Specifically, statistically significant differences occur between EAP and LAC or SAS in 14 of 24 cases, and between SSA and SAS or LAC in 11 of 24 cases. Consistent with results from Appendix Table 5, 20 of 36 of the pairwise differences in industry between Latin America and the other three regions are statistically significant at the 5% level.

Table 9 ESS Model: Sectoral Growth (semi-)Elasticities of Poverty by Region

Model	Agriculture				Industry				Trade				Transportation			
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA
Dlnp0spl3yr30 OLS	-2.240***	-0.420	-1.080*	-0.219	0.478	-2.162***	0.287	0.155*	1.672**	0.017	0.355	0.195	-1.051	-0.220	-0.906	-0.095
Dlnp0spl3yr42 RE	-1.508***	0.088	-0.316	-0.289	0.673***	-1.448**	0.180	0.058	0.317	-0.029	-0.055	0.035	-0.686*	-0.210	-0.490	-0.100
Dlnp0spl3yr83 RE	0.143	-0.030	0.033	-0.070	0.127	-0.775**	0.262*	0.036	-0.066	-0.023	-0.378**	-0.038	0.224	-0.230	-0.178	-0.022
Dlnp0splfyr30 OLS	-0.314	-0.537	-1.471	0.060	0.264	-1.648	0.292	0.169	1.599	-1.368	0.464	0.242	-1.087	0.282	-0.449	-0.099
Dlnp0splfyr42 OLS	-0.823	-0.346	-0.974	0.001	0.707***	-1.597*	0.403	0.127	1.485	-0.971	-0.001	0.070	-0.267	0.222	-0.405	-0.054
Dlnp0splfyr83 OLS	0.676	-0.011	-0.207	0.037	0.492	-0.997	0.393	0.061**	-0.335	-0.483	-0.454	-0.017	0.839	0.124	-0.136	-0.014
Dlnp0hybspl3yr RE	-0.043	0.111	-0.399	-0.104	0.195	-1.190**	0.244	0.013	-0.092	0.071	-0.085	0.198	0.023	-0.101	-0.627	-0.090
Dlnp0hybsplfyr OLS	0.503	0.167	-0.974	0.068	0.512*	-1.297	0.403	0.023	-0.624	-0.379	-0.001	0.221	1.003	0.125	-0.405	-0.051
Dlnq2spl3yr83 OLS	0.675***	0.152	0.862	0.078	-0.027	1.746***	-0.378	-0.112	-0.389**	0.374	0.263	-0.552	0.253	-0.284	0.070	0.076
Dlnq2splfyr83 OLS	0.282	0.315	0.897	0.012	-0.344	1.481	-0.371	-0.018	0.042	1.418	-0.019	-0.851***	-0.129	-0.575	0.196	0.254
Dlnq4spl3yr83 OLS	0.672***	0.197	0.719	0.138	0.003	1.236***	-0.376	-0.103	-0.393**	0.407	0.332	-0.440	0.271	-0.067	0.101	0.024
Dlnq4splfyr83 OLS	0.279	0.253	0.878	0.030	-0.287	1.151	-0.251	-0.027	0.005	1.093*	-0.159	-0.691**	-0.075	-0.318	0.191	0.178
Model	Business				Other				p values							
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	Trd Wald	Trn Wald	Bus Wald	Oth Wald	BPLM	AW	r2	N
Dlnp0spl3yr30 OLS	0.286	-0.144	0.557***	-0.024	-1.341***	1.229***	0.734	-0.484*	0.289	0.493	0.004	0.001	0.315	n/a	0.446	131
Dlnp0spl3yr42 RE	0.319***	-0.256	0.359***	0.039	-0.880***	1.208**	0.379	-0.214	0.835	0.415	0.011	0.000	0.000	0.886	0.417	134
Dlnp0spl3yr83 RE	0.017	-0.038	0.209**	0.025	-0.273	0.453	-0.071	-0.070	0.374	0.401	0.244	0.238	0.000	0.870	0.316	137
Dlnp0splfyr30 OLS	0.185	0.253	0.312	0.086	-1.256	1.172	-0.044	-0.722**	0.548	0.799	0.829	0.216	0.184	n/a	0.411	83
Dlnp0splfyr42 OLS	0.323	0.215	0.192	0.076	-1.526***	0.937	-0.226	-0.410*	0.469	0.857	0.691	0.051	0.220	n/a	0.459	85
Dlnp0splfyr83 OLS	0.286	0.199*	0.148	0.042	-0.782*	0.343	-0.265	-0.123	0.466	0.471	0.478	0.280	1.000	n/a	0.457	87
Dlnp0hybspl3yr RE	0.169	0.054	0.397***	-0.062	-0.355	0.444	0.359	-0.234	0.781	0.742	0.007	0.084	0.000	0.727	0.289	137
Dlnp0hybsplfyr OLS	0.528**	0.236	0.192	0.026	-0.973**	0.428	-0.226	-0.504***	0.504	0.512	0.222	0.245	1.000	n/a	0.443	87
Dlnq2spl3yr83 OLS	-0.124	-0.166	-0.381**	0.081	0.315	-0.919*	-0.596	1.035**	0.068	0.684	0.307	0.008	1.000	n/a	0.400	137
Dlnq2splfyr83 OLS	-0.244**	-0.319*	-0.376*	0.020	0.855**	-1.075*	-0.778*	0.993**	0.084	0.513	0.339	0.003	1.000	n/a	0.447	87
Dlnq4spl3yr83 OLS	-0.114	-0.184*	-0.396***	0.045	0.325	-0.703*	-0.560	0.966**	0.026	0.776	0.224	0.005	1.000	n/a	0.408	137
Dlnq4splfyr83 OLS	-0.205	-0.326***	-0.319*	-0.017	0.824**	-0.775	-0.691*	0.980**	0.064	0.638	0.367	0.003	1.000	n/a	0.442	87

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05.

Table 10 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Service Sub-sectors (Wald test, p values)

	Trade						Transport					
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA
Dlnp0spl3yr30	0.135	0.199	0.062	0.757	0.838	0.835	0.378	0.896	0.207	0.504	0.840	0.346
Dlnp0spl3yr42	0.626	0.372	0.530	0.966	0.917	0.704	0.447	0.729	0.140	0.666	0.827	0.365
Dlnp0spl3yr83	0.912	0.359	0.928	0.247	0.954	0.083	0.355	0.388	0.587	0.816	0.293	0.201
Dlnp0splfyr30	0.178	0.557	0.434	0.261	0.243	0.811	0.365	0.675	0.437	0.540	0.651	0.688
Dlnp0splfyr42	0.130	0.343	0.297	0.415	0.243	0.931	0.742	0.924	0.877	0.412	0.641	0.489
Dlnp0splfyr83	0.868	0.899	0.700	0.960	0.201	0.352	0.455	0.303	0.364	0.252	0.498	0.308
Dlnp0hybspl3yr	0.748	0.986	0.515	0.678	0.756	0.323	0.812	0.341	0.822	0.315	0.963	0.284
Dlnp0hybsplfyr	0.792	0.582	0.305	0.684	0.235	0.786	0.369	0.192	0.272	0.328	0.469	0.478
Dlnq2spl3yr83	0.232	0.024	0.663	0.864	0.186	0.046	0.229	0.590	0.583	0.419	0.398	0.985
Dlnq2splfyr83	0.192	0.937	0.110	0.207	0.027	0.237	0.550	0.525	0.420	0.237	0.185	0.845
Dlnq4spl3yr83	0.062	0.010	0.894	0.863	0.092	0.044	0.328	0.595	0.423	0.606	0.769	0.789
Dlnq4splfyr83	0.146	0.811	0.194	0.119	0.010	0.375	0.677	0.583	0.572	0.273	0.244	0.962
	Business						Other					
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA
Dlnp0spl3yr30	0.291	0.408	0.345	0.019	0.677	0.001	0.000	0.011	0.070	0.540	0.002	0.097
Dlnp0spl3yr42	0.023	0.764	0.045	0.013	0.242	0.014	0.000	0.001	0.032	0.169	0.011	0.159
Dlnp0spl3yr83	0.719	0.164	0.938	0.080	0.589	0.067	0.040	0.311	0.339	0.081	0.090	0.995
Dlnp0splfyr30	0.870	0.782	0.799	0.863	0.481	0.455	0.090	0.325	0.623	0.293	0.064	0.356
Dlnp0splfyr42	0.670	0.704	0.276	0.942	0.462	0.702	0.008	0.049	0.056	0.154	0.078	0.678
Dlnp0splfyr83	0.751	0.623	0.337	0.770	0.223	0.465	0.073	0.265	0.139	0.203	0.305	0.483
Dlnp0hybspl3yr	0.501	0.156	0.116	0.031	0.424	0.001	0.052	0.137	0.722	0.856	0.035	0.144
Dlnp0hybsplfyr	0.329	0.380	0.068	0.890	0.225	0.573	0.057	0.196	0.312	0.342	0.124	0.498
Dlnq2spl3yr83	0.823	0.160	0.304	0.367	0.328	0.067	0.034	0.052	0.117	0.616	0.004	0.005
Dlnq2splfyr83	0.710	0.577	0.182	0.828	0.137	0.127	0.008	0.004	0.814	0.682	0.010	0.007
Dlnq4spl3yr83	0.582	0.099	0.390	0.233	0.238	0.052	0.021	0.039	0.141	0.775	0.002	0.004
Dlnq4splfyr83	0.446	0.588	0.351	0.973	0.094	0.190	0.011	0.003	0.782	0.889	0.013	0.006

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent  $p < 0.05$ .

### 5.2.3 Results by Income Level

Table 11 presents the sectoral growth elasticities of poverty disaggregated by income-level. To recall, the income-level groups distinguish upper-middle (UMC) income, lower-middle income (LMC) and low-income categories (LIC) drawing on the World Bank's classification. The full interaction model results used to calculate the slope values for the non-base categories in Table 11 are presented in Appendix Table 25.

In the expanded service sector, the strongest results in Table 11 are in business where growth is strongly poverty-reducing in LICs. All models have the expected signs and 5 of 12 are significant at the 5% level. The opposite pattern holds for UMCs in the business sector where all results are poverty-increasing and 7 of 12 statistically significant at the 5% level. Trade is signed as poverty-reducing in UMCs in 11 of 12 models, though results are not statistically significant. In terms of agriculture, we find the same curious pattern as in Table 5, where growth is consistently poverty-reducing in LMCs (11 of 12 models, of which 5 are statistically significant at the 5% level) and UMCs (10 of 12 models, of which 3 are statistically significant at the 5% level) but *poverty-increasing* in LICs in 10 of 12 models, none of which are statistically significant. For industry, all models are poverty-reducing in UMCs (4 of 12 are statistically significant at the 5% level), though results are mixed for the other income groups.

As in section 5.1.3, results are presented for joint Wald tests in Table 11 and Appendix Table 25, and pairwise Wald tests in Table 12 and Appendix Table 26 to assess the statistical significance of differences between income groups. The joint Wald test rejects the nul hypothesis of coefficient equality in 9 of 12 models in the business sector and 5 of 12 cases in agriculture. In terms of pairwise comparisons, the strongest finding in Table 12 is that 11 of the 12 differences between LICs and UMCs in the business sector are statistically significant at the 5% level. Further, in agriculture, we find statistically significant differences at the 5% level between LICs and LMCs in 6 of 12 cases and between LICs and UMCs in 4 of 12 models. Few of the other pairwise comparisons are statistically significant.

Table 11 ESS Model: Sectoral Growth (semi-)Elasticities of Poverty by Income-level

Model	Agriculture			Industry			Trade			Transport			Business		
	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC
Dlnp0spl3yr30 RE	0.087	0.059	-0.875*	0.015	-0.337	-0.744**	0.226	0.513	0.455	-0.333	-0.236	-0.271	-0.233**	0.073	0.266*
Dlnp0spl3yr42 RE	-0.065	-0.327	-0.668***	-0.025	-0.035	-0.170	0.090	-0.187	-0.147	-0.200	0.090	-0.258	-0.146**	0.022	0.249***
Dlnp0spl3yr83 RE	-0.003	-0.088	-0.069	-0.000	-0.022	-0.202	-0.045	-0.054	-0.218	-0.012	0.024	-0.016	-0.027**	-0.011	0.069
Dlnp0splfyr30 OLS	0.610	-0.877**	-0.627	-0.040	-0.231	-1.071***	-0.066	0.379	-0.164	0.106	0.201	-0.337	-0.094	-0.061	0.368**
Dlnp0splfyr42 RE	0.306	-0.772***	-0.545	-0.044	0.276	-0.498	-0.152	-0.243	-0.355	0.135**	0.250	-0.024	-0.047	-0.132	0.534***
Dlnp0splfyr83 RE	0.100	-0.289**	0.148	-0.011	0.107	-0.223	-0.093***	-0.004	-0.618	0.049***	0.126	0.438	-0.015***	-0.078	0.233**
Dlnp0hybspl3yrRE	0.079	-0.562	-0.067	0.011	0.016	-0.202	0.260	-0.131	-0.213	-0.327	0.158	-0.019	-0.220**	-0.031	0.069
Dlnp0hybsplfyr RE	0.596	-0.993***	0.145	-0.033	0.319	-0.215	-0.080	-0.113	-0.584	0.129	0.364	0.421	-0.086	-0.179	0.229**
Dlnq2spl3yr83 OLS	-0.794	0.379*	0.626***	0.133	0.014	0.405***	-0.433	-0.162	0.263	0.225	-0.088	0.035	0.235*	-0.153	-0.103
Dlnq2splfyr83 OLS	-0.510	0.427*	0.516*	0.123	-0.010	0.208	-0.621	-0.261	0.643	0.272	-0.029	-0.109	0.276	-0.113	-0.243**
Dlnq4spl3yr83 OLS	-0.618	0.356*	0.547***	0.112	-0.023	0.367***	-0.308	-0.070	0.206	0.119	-0.057	0.154	0.222*	-0.175	-0.136*
Dlnq4splfyr83 OLS	-0.469	0.401**	0.375	0.118	-0.034	0.247*	-0.412	-0.174	0.517	0.106	-0.030	-0.001	0.250	-0.127	-0.290***
Model	Other			p values											
	LIC	LMC	UMC	Trd Wald	Trn Wald	Bus Wald	Oth Wald	BPLM	AW	r2	N				
Dlnp0spl3yr30 RE	0.212	-0.456	-0.727	0.873	0.973	0.013	0.214	0.045	0.702	0.210	143				
Dlnp0spl3yr42 RE	0.134	-0.161	-0.427	0.664	0.535	0.001	0.188	0.000	0.772	0.217	148				
Dlnp0spl3yr83 RE	0.028	-0.114	0.043	0.789	0.951	0.493	0.408	0.000	0.853	0.195	151				
Dlnp0splfyr30 OLS	-0.453*	-0.504	0.106	0.717	0.666	0.055	0.683	0.266	n/a	0.322	92				
Dlnp0splfyr42 RE	-0.187	-0.398	-0.822*	0.918	0.812	0.000	0.324	0.006	0.968	0.295	96				
Dlnp0splfyr83 RE	-0.053***	-0.214**	-0.180	0.647	0.603	0.088	0.289	0.000	0.993	0.259	98				
Dlnp0hybspl3yrRE	0.107	-0.249	0.038	0.603	0.448	0.049	0.518	0.000	0.278	0.142	151				
Dlnp0hybsplfyr RE	-0.413	-0.490*	-0.216	0.752	0.693	0.037	0.820	0.014	0.955	0.253	98				
Dlnq2spl3yr83 OLS	0.616***	0.566	-0.330	0.513	0.632	0.075	0.038	1.000	n/a	0.241	151				
Dlnq2splfyr83 OLS	0.404	0.664**	0.029	0.257	0.866	0.067	0.393	1.000	n/a	0.288	98				
Dlnq4spl3yr83 OLS	0.543***	0.581*	-0.229	0.638	0.453	0.036	0.024	1.000	n/a	0.287	151				
Dlnq4splfyr83 OLS	0.428	0.689**	0.132	0.267	0.970	0.026	0.371	1.000	n/a	0.328	98				

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05.

Table 12 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-level, Service Sub-sectors (Wald test, p values)

	Trade			Transport			Business			Other		
	LIC- LMC	LIC- UMC	LMC- UMC									
Dlnp0spl3yr30	0.627	0.737	0.939	0.823	0.879	0.940	0.153	0.005	0.428	0.260	0.141	0.740
Dlnp0spl3yr42	0.413	0.617	0.941	0.327	0.819	0.289	0.276	0.000	0.172	0.423	0.082	0.560
Dlnp0spl3yr83	0.962	0.492	0.596	0.754	0.983	0.855	0.870	0.238	0.535	0.182	0.937	0.475
Dlnp0splfyr30	0.442	0.916	0.587	0.785	0.424	0.375	0.913	0.017	0.215	0.941	0.398	0.490
Dlnp0splfyr42	0.789	0.744	0.873	0.645	0.663	0.529	0.727	0.000	0.017	0.548	0.152	0.429
Dlnp0splfyr83	0.662	0.411	0.358	0.540	0.424	0.535	0.668	0.030	0.096	0.125	0.705	0.924
Dlnp0hybspl3yr	0.446	0.318	0.838	0.207	0.377	0.572	0.353	0.014	0.617	0.258	0.792	0.375
Dlnp0hybsplfyr	0.943	0.460	0.502	0.457	0.567	0.916	0.732	0.013	0.154	0.838	0.648	0.533
Dlnq2spl3yr83	0.652	0.312	0.328	0.416	0.634	0.529	0.066	0.032	0.774	0.907	0.013	0.065
Dlnq2splfyr83	0.697	0.229	0.120	0.640	0.595	0.831	0.087	0.021	0.409	0.672	0.576	0.175
Dlnq4spl3yr83	0.665	0.402	0.444	0.626	0.923	0.222	0.032	0.015	0.794	0.921	0.011	0.045
Dlnq4splfyr83	0.771	0.300	0.119	0.818	0.868	0.922	0.078	0.008	0.224	0.666	0.634	0.162

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05.

## 5.2.4 Robustness Checks

To recall from sections 2 and 5.1.4, we perform robustness checks by using the lagged values of the sectoral regressors (for simultaneity bias) as well as time dummy variables corresponding to the start date of the spell (for omitted variable bias, such as economic shocks). Table 13 presents a summary table of results from the different levels of analysis undertaken which are subsequently reviewed in turn.

Table 13 ESS Model: Robustness Results

Expanded Service Sector Model	Signed /12	StatSig (5%) /12	Robustness	
			Lag	Time
1. Overall				
1.1 The 'Other' Services Sector is Poverty-Reducing	11	2	✗	✗
1.2 Agriculture is Poverty-Reducing	11	0	✓	✓
1.3 Transport is Somewhat Poverty-Reducing	9	0	✓	✓
2. Region				
2.1 The 'Other' Services Sector is Poverty-Reducing in EAP	12	6	✓	✓
2.2 The 'Other' Services Sector is Poverty-Reducing in SSA	12	6	✓	✓/✗
2.3 The 'Business' Sector is Poverty- <b>Increasing</b> in SAS	12	6	✓	✓
2.4 The 'Business' Sector is Poverty- <b>Increasing</b> in EAP	12	3	✓	✓
2.5 Agriculture is Poverty-Reducing in EAP	9	4	✓	✓
2.6 Industry is Poverty-Reducing in LAC	12	6	✓	✓
2.7 Industry is Poverty- <b>Increasing</b> in SAS	12	0	✗	✗
2.8 Within 'Other' Services, stat sig differences (EAP vs LAC/SAS)	n/a	14/24	✗	✓/✗
2. Within 'Other' Services, stat sig differences (SSA vs. LAC/SAS)	n/a	11/24	✓/✗	✓/✗
2.10 Within Industry, stat sig differences (LAC vs other regions)	n/a	20/36	✓/✗	✓
3. Income Level				
3.1 Business is Poverty-Reducing in LICs	12	5	✗	✓
3.2 Business is Poverty- <b>Increasing</b> UMCs	12	7	✗	✓
3.3 Trade is Poverty-Reducing in UMCs	11	0	✓/✗	✓
3.4 Agriculture is Poverty- <b>Increasing</b> in LICs	10	0	✓	✓
3.5 Agriculture is Poverty-Reducing in LMCs	11	5	✓	✓
3.6 Agriculture is Poverty-Reducing in UMCs	10	3	✗	✓
3.7 Industry is Poverty-Reducing in UMCs	12	4	✓/✗	✓
3.8 Within Business, stat sig differences (LICs vs UMCs)	n/a	11/12	✗	✓
3.9 Within Agriculture, stat sig differences (LICs vs the rest)	n/a	10/24	✓/✗	✓/✗

### *i. Overall Results*

In both the lagged regressor model (Appendix Table 17) and the time dummy variable model (Appendix Table 18) the 'other' service sector is only poverty-reducing in 4 of 12 models and not statistically significant at the 5% level. By contrast, agriculture and transport remain signed as poverty-reducing in 9 of 12 models and 8 of 12 models, respectively.

### *ii. Results by Region*

Most of the regional SGEP results are not sensitive to the use of lagged variables, though only the three-year spells could be used as comparators<sup>6</sup> (Appendix Table 21). 'Other' services remained poverty-reducing in all models in EAP (though not statistically significant) and in SSA (3 of 6 were statistically significant at the 5% level). The business sector remains poverty-increasing in all models in EAP and in 5 of 6 models

<sup>6</sup> There were insufficient within-panel degrees of freedom to run the regional regressions with time fixed effects.

in SAS (though not statistically significant in either), while agriculture remains poverty-reducing in all models in EAP (2 of 6 were statistically significant at the 5% level). Industry is no longer poverty-increasing in SAS but remains so in all models in LAC (4 of 6 are statistically significant at the 5% level). Coefficient equality is still rejected in at least half of the models in 'other' services, business and industry. The pairwise comparisons in 'other' services, however, no longer reveal differences between EAP and other regions, but do so between SSA and LAC. Within industry, statistically significant differences persist between LAC and SSA only (Appendix Table 22).

The time dummy variable models generate similar results to the lagged variable regressions (Appendix Table 23). There are only four results which differ from those of the base regressions namely: i) the 'other' service sector is only weakly poverty-reducing in SSA (with 2 of 6 results poverty-increasing); ii) industry is no longer poverty-increasing in SAS; iii) within 'other' services, the statistically significant pairwise differences are now limited to those between LAC on the one hand and EAP and SSA on the other. (Appendix Table 24).

### *iii. Results by Income Level*

Only two of the key findings from the base regressions are strongly affirmed when using the lagged regressions, namely that agriculture is poverty-increasing in 5 of 6 models in LICs all of which are statistically significant at the 1% level, and poverty-reducing in all models in LMCs, though not statistically significant (Appendix Table 27). Agriculture is no longer poverty-reducing in UMCs. In the business sector, there are no longer any strong poverty-related relationships nor any statistically significant pairwise differences. There is partial confirmation of the poverty-reducing effects of trade and industry in UMCs (4 of 6 models are signed as expected in each). Within agricultural, statistically significant pairwise differences remain between LICs and LMCs, though not with UMCs (Appendix Table 28).

When using the time dummy models, all but one of the original SGEP results are robust (Appendix Table 29). The exception is that within agriculture, there are statistically significant pairwise differences between LICs and both LMCs and UMCs in only 6 of 24 models (Appendix Table 30).

## 5.2.5 Summary

The Expanded Service Sector (ESS) model estimated partial sectoral growth (semi-) elasticities of poverty for agriculture, industry, trade, transport, business and a residual 'other' category. Overall, few results were statistically significant, though most were signed as poverty-reducing. The strongest results were found in the residual 'other' services sector where all but one coefficient was poverty-reducing and 2 of 12 models were statistically significant at the 5% level. This result was not robust in the lagged and time dummy variable regressions.

In terms of the regionally disaggregated models, the strongest poverty-reducing results emerged from EAP and SSA for the 'other' services category where all coefficients were signed as expected and many are statistically significant. Second, the opposite pattern held generally for business across all regions, and strongly for SAS and EAP, where all coefficients were poverty-increasing and many statistically significant at the 5% level. In industry, poverty-reducing effects were found in all models in Latin America (6 of which were statistically significant at the 5% level) which contrasted with South Asia where all models were signed as poverty-increasing (though not statistically significant). The joint Wald test rejected regional coefficient equality, at the 5% level, for 'other' services in 6 of 12 models, and for industry in 6 of 12 models. In terms of pairwise comparisons, the strongest results were in the 'other' services category where statistically significant differences occurred between EAP and LAC or SAS in 14 of 24 cases, and between SSA and SAS or LAC in 11 of 24 cases. Twenty of 36 of the pairwise differences in industry between Latin America and the other three regions were statistically significant at the 5% level. Most of these results were

robust to the use of lagged and time dummy variables with the exception of the poverty-increasing effects of industry in SAS and, in part, the pairwise comparisons.

For the models disaggregated by income-level, the strongest statistically significant results were in the business sector where strong poverty-reducing effects were found in LICs and strong poverty-increasing effects in UMCs. Trade was consistently signed as poverty-reducing in UMCs but not elsewhere. In agriculture, we found the same curious pattern as in Table 5, where growth was consistently poverty-reducing in LMCs and UMCs but *not* in LICs. For industry, all models were poverty-reducing in UMCs though results are mixed for the other income groups. The joint Wald test rejected the nul hypothesis of coefficient equality in 9 of 12 models in the business sector and 5 of 12 cases in agriculture. In terms of pairwise comparisons, the strongest finding was that 11 of 12 of the differences between LICs and UMCs in the business sector were statistically significant at the 5% level. Further, in agriculture, statistically significant differences between LICs and LMCs and between LICs and UMCs were found in a number of cases. All of these findings were fully or partially robust to the use of the time dummy variable regressions though over half were either fully or partially overturned in the lagged variable regressions.

## 6. Summary & Conclusion

The core objective of the preceding analysis has been to ‘shake the econometric bush’ to see if robust conditional associations between changes in poverty and sectoral growth emerged. Key findings from the BB and ESS models have already been identified and presented in in Table 7 and Table 13, respectively. In this section, a subset of these findings is selected which arguably represent the strongest results from the analysis.

Selection criteria for inclusion in the ‘strongest’ category is obviously a judgment call. It is based on the following elements:

- 1) at least 10 of the 12 initial regression model runs should be signed in a manner consistent with the result<sup>7</sup>;
- 2) there should be at least one statistically significant result at the 5% level from the original 12 regressions;
- 3) results should be robust to at least one of the two robustness checks (the lagged or time dummy regressions)

Table 14 presents the key findings which survive these criteria, regrouped by sector.

Table 14 Sectoral Growth Elasticities of Poverty Key Results

	Signed /12	StatSig (5%) /12	Robustness	
			Lag	Time
<b>1. Service Sector</b>				
1. The Service Sector is Poverty-Reducing	12	3	✓	✓/✗
2. The Service Sector is Poverty-Reducing in EAP	12	2	✗	✓
3. The Service Sector is Poverty- <b>Increasing</b> in LAC	12	2	✗	✓
4. The Service Sector is Poverty-Reducing in LICs	12	1	✓	✗
5. The 'Other' Services Sector is Poverty-Reducing in EAP	12	6	✓	✓
6. The 'Other' Services Sector is Poverty-Reducing in SSA	12	6	✓	✓/✗
7. The 'Business' Sector is Poverty- <b>Increasing</b> in SAS	12	6	✓	✓
8. The 'Business' Sector is Poverty- <b>Increasing</b> in EAP	12	3	✓	✓
9. The 'Business' Sector is Poverty-Reducing in LICs	12	5	✗	✓
10. The 'Business' Sector is Poverty- <b>Increasing</b> UMCs	12	7	✗	✓
<b>2. Agriculture</b>				
1. Agriculture is Poverty- <b>Increasing</b> in LICs	10	3	✗	✓
2. Agriculture is Poverty-Reducing in LMCs (BB Model)	12	5	✓	✓
3. Agriculture is Poverty-Reducing in EAP	9	4	✓	✓
4. Agriculture is Poverty-Reducing in LMCs (ESS Model)	11	5	✓	✓
5. Agriculture is Poverty-Reducing in UMCs	10	3	✗	✓
<b>3. Industry</b>				
1. Industry is Poverty-Reducing in LAC (BB Model)	12	11	✗	✓
2. Industry is Poverty-Reducing in UMCs (BB Model)	12	3	✓	✓
3. Industry is Poverty-Reducing in LAC (ESS Model)	12	6	✓	✓
4. Industry is Poverty-Reducing in UMCs (ESS Model)	12	4	✓/✗	✓

<sup>7</sup> The 10 of 12 rule corresponds to a binomial distribution where the (two-sided) p-value of generating the same sign in 10 of 12 ‘flips’ is 0.039. This is very much a ‘rule of thumb’ approximation, given that the poverty measures in the different models are not independent of one another.

We summarise the key results from Table 14 as follows:

- the service sector is poverty-reducing overall, in East Asia and the Pacific (EAP) and in Low-income Countries (LICs), but not in Latin America and the Caribbean (LAC). The ‘other’ services category is poverty-reducing in EAP and Sub-Saharan Africa (SSA). Business is poverty-**increasing** in South Asia (SAS), EAP and Upper-Middle Income Countries (UMCs) but not in LICs.
- agriculture is poverty-reducing in EAP, Lower-Middle Income Countries (LMCs) and UMCs but not in LICs (as noted, this surprising results requires further investigation).
- Industry is poverty-reducing in LAC and UMCs.

If valid, conditional associations such as these can be useful to spur inquiry about the underlying mechanisms generating them. Such inquiry requires a broader methodological toolkit and more micro-level analysis situated within the framework of a comparative country-case study design. It is foreseen that this type of analysis will form a major component of the ISSG research program.

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## Appendix Tables

### A.1 Bare Bones Model

Appendix Table 1 BB Model: Diagnostics

Model	Variance Inflation Factor (VIF)			Outlier Regressions (Beta)			
	Ag	Ind	Ser	Ag	Ind	Ser	
Dlnp0spl3yr30	FE	1.173	1.690	1.841	0.159	-0.152	-0.187
Dlnp0spl3yr42	FE	1.158	1.637	1.797	-0.086	-0.025	-0.320
Dlnp0spl3yr83	FE	1.152	1.635	1.793	-0.105	-0.054	-0.053
Dlnp0splfyr30	OLS	1.092	1.678	1.760	-0.715	0.050	-0.241
Dlnp0splfyr42	RE	1.097	1.209	1.295	0.290	-0.067	-0.243
Dlnp0splfyr83	RE	1.097	1.206	1.291	-0.119	0.017	-0.043
Dlnp0hybspl3yr	FE	1.152	1.635	1.793	0.022	-0.005	-0.279
Dlnp0hybsplfyr	RE	1.097	1.206	1.291	-0.134	0.066	-0.765
Dlnq2spl3yr83	OLS	1.083	1.817	1.891	0.233	0.054	0.122
Dlnq2splfyr83	OLS	1.080	1.606	1.685	0.247	-0.046	0.268
Dlnq4spl3yr83	OLS	1.083	1.817	1.891	0.233	0.053	0.192
Dlnq4splfyr83	OLS	1.080	1.606	1.685	0.224	-0.019	0.318

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr=spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded items represent possible sign flips due to outliers in Table 2.

Appendix Table 2 BB Model: SGEPLagged Variables

	Model	Ag (Lag)	Ind (Lag)	Ser (Lag)	BPLM (p)	AW (p)	Wald (p)	r2	N
Dlnp0spl3yr30	OLS	-0.093	-0.238	-0.049	0.117	n/a	0.937	0.022	79
Dlnp0spl3yr42	RE	0.256	-0.040	-0.205	0.000	0.833	0.369	0.000	84
Dlnp0spl3yr83	RE	-0.019	0.054	0.002	0.000	0.999	0.915	0.007	86
Dlnp0splfyr30	OLS	-0.124	-0.030	-0.037	0.343	n/a	0.984	0.007	37
Dlnp0splfyr42	OLS	-0.051	0.023	-0.138	0.192	n/a	0.949	0.004	40
Dlnp0splfyr83	RE	-0.169	0.038	-0.037	0.000	0.776	0.712	0.009	42
Dlnp0hybspl3yr	RE	0.203	0.019	-0.121	0.015	0.738	0.683	0.000	86
Dlnp0hybsplfyr	RE	-0.240	-0.033	-0.092	0.029	0.673	0.717	0.005	42
Dlnq2spl3yr83	OLS	0.153	0.077	0.039	0.447	n/a	0.947	0.018	86
Dlnq2splfyr83	OLS	0.147	0.025	-0.076	1.000	n/a	0.706	0.015	42
Dlnq4spl3yr83	OLS	0.090	0.081	0.090	0.476	n/a	0.999	0.027	86
Dlnq4splfyr83	OLS	0.021	0.029	0.016	1.000	n/a	0.998	0.004	42

Variables are annualised differences over spells. Dln=log differences; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.

Appendix Table 3 BB Model: SGEP Time Dummy

	Model	Ag	Ind	Ser	BPLM (p)	AW (p)	Wald (p)	r2	N
Dlnp0spl3yr30	FE	0.367	-0.448*	0.072	0.014	0.047	0.128	0.464	143
Dlnp0spl3yr42	RE	-0.299	-0.077	-0.425**	0.000	0.179	0.498	0.201	148
Dlnp0spl3yr83	FE	0.296	-0.180*	-0.064	0.000	0.011	0.238	0.408	151
Dlnp0splfyr30	OLS	-0.203	-0.183	-0.352	0.069	0.014	0.953	0.243	92
Dlnp0splfyr42	FE	-0.669**	-0.021	0.665*	0.000	0.019	0.072	0.794	96
Dlnp0splfyr83	FE	-0.234	-0.116*	0.397**	0.000	0.022	0.105	0.766	98
Dlnp0hybspl3yr	RE	-0.006	-0.083	-0.192	0.000	0.067	0.703	0.181	151
Dlnp0hybsplfyr	FE	-0.283	0.002	0.290	0.000	0.023	0.464	0.752	98
Dlnq2spl3yr83	OLS	0.231	0.127	0.093	0.494	0.005	0.879	0.243	151
Dlnq2splfyr83	OLS	0.178	0.087	0.190	0.402	0.064	0.908	0.309	98
Dlnq4spl3yr83	OLS	0.217	0.090	0.174	0.470	0.004	0.918	0.256	151
Dlnq4splfyr83	OLS	0.119	0.061	0.252	0.310	0.081	0.752	0.318	98

Variables are annualised differences over spells. Dln=log differences; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.

Appendix Table 4 BB Model: Sector\*Region Interactions (base = EAP)

	Model	Ag×LAC	Ag×SAS	Ag×SSA	Ind×LAC	Ind×SAS	Ind×SSA	Ser×LAC	Ser×SAS	Ser×SSA	Ag Wald (p)	Ind Wald (p)	Ser Wald (p)
Dlnp0spl3yr30	OLS	1.653**	0.871	1.794***	-2.929***	-0.179	-0.367	1.205	0.952	0.016	0.011	0.001	0.271
Dlnp0spl3yr42	RE	1.426**	1.177***	0.932**	-2.384***	-0.583*	-0.574***	1.402**	1.044**	0.609**	0.034	0.000	0.007
Dlnp0spl3yr83	RE	-0.043	0.029	-0.150	-1.199***	-0.209	-0.241**	0.539*	0.077	0.242	0.794	0.000	0.259
Dlnp0splfyr30	OLS	-0.948	-2.058	-0.259	-2.057*	0.584	0.234	1.503	0.820	0.250	0.388	0.094	0.474
Dlnp0splfyr42	RE	0.106	-0.570	0.133	-2.642***	-0.515	-0.585**	1.707*	0.800	0.647	0.825	0.025	0.399
Dlnp0splfyr83	RE	-0.635	-0.958*	-0.562	-1.802**	-0.430	-0.586	0.877	0.099	0.373	0.344	0.038	0.338
Dlnp0hybspl3yr	RE	0.156	-0.247	-0.083	-1.535***	-0.130	-0.245	0.917*	0.524	0.255	0.912	0.017	0.291
Dlnp0hybsplfyr	RE	-0.193	-1.512*	-0.323	-2.098**	-0.266	-0.622	1.221	0.275	0.356	0.420	0.079	0.497
Dlnq2spl3yr83	OLS	-0.452	0.227	-0.623	1.995***	0.007	-0.138	-1.062*	-1.012	0.548	0.548	0.003	0.064
Dlnq2splfyr83	OLS	0.293	1.075	-0.210	2.161**	0.011	0.334	-1.645*	-1.675**	-0.454	0.656	0.104	0.069
Dlnq4spl3yr83	OLS	-0.448	0.084	-0.533	1.507***	-0.010	-0.164	-0.773*	-0.922	0.475	0.583	0.001	0.080
Dlnq4splfyr83	OLS	0.159	0.998	-0.161	1.777**	-0.001	0.260	-1.486**	-1.606**	-0.435	0.666	0.098	0.056

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.

EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa

Bolded values represent p<0.05

Appendix Table 5 BB Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Agriculture and Industry (Wald test, p values)

	Agriculture						Industry					
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA
Dlnp0spl3yr30	0.049	0.250	0.001	0.413	0.856	0.199	0.002	0.851	0.592	0.004	0.000	0.779
Dlnp0spl3yr42	0.049	0.006	0.024	0.713	0.462	0.454	0.000	0.078	0.007	0.001	0.000	0.974
Dlnp0spl3yr83	0.933	0.915	0.528	0.884	0.821	0.364	0.000	0.146	0.028	0.000	0.000	0.752
Dlnp0splfyr30	0.579	0.260	0.867	0.400	0.453	0.108	0.058	0.540	0.677	0.031	0.015	0.653
Dlnp0splfyr42	0.911	0.548	0.853	0.484	0.970	0.347	0.010	0.243	0.027	0.043	0.038	0.848
Dlnp0splfyr83	0.305	0.073	0.227	0.540	0.874	0.234	0.013	0.404	0.242	0.010	0.020	0.206
Dlnp0hybspl3yr	0.801	0.545	0.764	0.546	0.689	0.657	0.002	0.705	0.149	0.011	0.005	0.707
Dlnp0hybsplfyr	0.805	0.099	0.530	0.182	0.836	0.136	0.016	0.643	0.118	0.038	0.058	0.397
Dlnq2spl3yr83	0.523	0.717	0.219	0.451	0.834	0.261	0.001	0.986	0.673	0.002	0.000	0.708
Dlnq2splfyr83	0.748	0.326	0.696	0.549	0.574	0.235	0.024	0.978	0.306	0.024	0.046	0.319
Dlnq4spl3yr83	0.398	0.872	0.258	0.437	0.894	0.335	0.001	0.978	0.585	0.002	0.000	0.661
Dlnq4splfyr83	0.828	0.307	0.765	0.433	0.647	0.225	0.019	0.999	0.378	0.020	0.035	0.383

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05

Appendix Table 6 BB Model: SGEP by Region, Lagged Variables (Base=EAP)

Model	Agriculture (Lag)				Industry (Lag)				Services (Lag)				Ag Wald (p)	Ind Wald (p)	Ser Wald (p)	r2	N
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA					
Dlnp0spl3yr30 OLS	-1.155	1.096	-0.132	0.703**	-0.053	-1.104*	-0.193	0.098	-0.133	0.894	-0.367	-0.715**	0.568	0.192	0.309	0.277	75
Dlnp0spl3yr42 RE	-0.546	0.916	-0.778	0.363**	0.240	-0.441	-0.042	0.064	0.055	0.145	0.374	-0.335*	0.185	0.809	0.509	0.277	78
Dlnp0spl3yr83 RE	-0.942**	0.506	-0.721**	0.117	0.712	-0.433	0.081	0.041	0.016	0.331	0.254	-0.051	0.005	0.448	0.644	0.363	80
Dlnp0splfyr30 OLS	6.540***	-0.715	0.211	0.516	-0.685***	1.822	0.161	0.097	-0.279	-1.757	-1.665**	-0.333	0.009	0.015	0.147	0.540	35
Dlnp0splfyr42 OLS	-13.308	-0.695	-0.467	0.509	0.979	1.206	0.183	0.092	0.386	-1.218	-1.190**	-0.373	0.465	0.743	0.314	0.422	36
Dlnp0splfyr83 OLS	-7.979***	-0.521	-0.525	0.242	1.404	0.348	0.180	0.062	-0.133	-0.463	-0.286	-0.128	0.000	0.415	0.892	0.646	38
Dlnp0hybspl3yr OLS	-0.885	0.447	-1.062*	0.596**	0.742	-0.556	0.088	0.081	0.152	0.375	0.252	-0.611**	0.019	0.423	0.168	0.332	80
Dlnp0hybsplfyr OLS	-7.221***	-0.592	-0.467	0.270	1.267	0.482	0.183	0.047	0.081	-0.531	-1.190**	-0.217	0.000	0.472	0.154	0.638	38
Dlnq2spl3yr83 OLS	-0.081	-0.079	-0.509***	-0.036	0.021	0.862*	0.222*	0.009	0.175	-0.947	0.371*	0.574	0.544	0.261	0.167	0.236	80
Dlnq2splfyr83 OLS	2.452	0.418	-0.274	0.169	-0.233	-0.745	0.044	0.104	-0.087	0.654	0.396*	-0.283	0.296	0.725	0.243	0.344	38
Dlnq4spl3yr83 OLS	-0.002	-0.066	-0.257**	-0.164	0.029	0.644	0.143	0.035	0.211	-0.745	0.223	0.575	0.917	0.534	0.243	0.234	80
Dlnq4splfyr83 OLS	2.044	0.445	-0.277	-0.106	-0.200	-0.479	0.096	0.089	0.018	0.433	0.436**	-0.099	0.415	0.838	0.369	0.331	38

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05

Appendix Table 7 BB Model, Pairwise SGEP Comparisons by Region, Lagged Variables (Wald test, p values)

Model	Ser						Agriculture						Industry						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.313	0.815	0.286	0.320	0.093	0.705	0.287	0.611	0.315	0.367	0.717	0.358	0.255	0.877	0.837	0.239	0.037	0.590
Dlnp0spl3yr42	RE	0.940	0.636	0.416	0.853	0.672	0.183	0.278	0.851	0.409	0.084	0.495	0.057	0.390	0.615	0.728	0.545	0.411	0.678
Dlnp0spl3yr83	RE	0.673	0.515	0.806	0.917	0.585	0.240	0.008	0.678	0.013	0.014	0.305	0.020	0.133	0.273	0.242	0.310	0.347	0.528
Dlnp0splfyr30	OLS	0.218	0.046	0.890	0.945	0.250	0.079	0.001	0.005	0.002	0.584	0.333	0.813	0.164	0.026	0.003	0.354	0.331	0.838
Dlnp0splfyr42	OLS	0.189	0.102	0.354	0.980	0.394	0.209	0.404	0.396	0.360	0.882	0.255	0.441	0.905	0.574	0.523	0.441	0.391	0.764
Dlnp0splfyr83	OLS	0.535	0.688	0.984	0.761	0.513	0.653	0.000	0.000	0.000	0.996	0.216	0.267	0.334	0.189	0.146	0.784	0.633	0.473
Dlnp0hybspl3yr	OLS	0.722	0.891	0.062	0.887	0.115	0.235	0.073	0.828	0.031	0.030	0.751	0.009	0.120	0.365	0.333	0.228	0.181	0.980
Dlnp0hybsplfyr	OLS	0.261	0.037	0.261	0.378	0.551	0.099	0.000	0.000	0.000	0.924	0.158	0.536	0.470	0.249	0.177	0.664	0.491	0.638
Dlnq2spl3yr83	OLS	0.078	0.508	0.449	0.036	0.048	0.688	0.998	0.455	0.950	0.421	0.949	0.305	0.122	0.529	0.972	0.169	0.075	0.250
Dlnq2splfyr83	OLS	0.308	0.202	0.670	0.703	0.205	0.090	0.282	0.130	0.203	0.347	0.737	0.257	0.631	0.635	0.565	0.383	0.349	0.654
Dlnq4spl3yr83	OLS	0.095	0.966	0.429	0.082	0.049	0.423	0.919	0.621	0.797	0.629	0.855	0.809	0.230	0.688	0.982	0.256	0.177	0.459
Dlnq4splfyr83	OLS	0.540	0.259	0.772	0.996	0.419	0.113	0.365	0.167	0.202	0.307	0.448	0.674	0.768	0.573	0.579	0.474	0.478	0.955

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05

Appendix Table 8 BB Model: SGEP by Region, Time Dummy (Base=EAP)

Model	Agriculture				Industry				Services				Ag Wald (p)	Ind Wald (p)	Ser Wald (p)	r2	N
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA					
Dlnp0spl3yr30 OLS	-1.297**	-0.330	-0.975	-0.026	0.110	-2.616***	0.418	-0.091	-0.079	1.211*	0.059	-0.146	0.526	0.016	0.383	0.499	131
Dlnp0spl3yr42 RE	-0.661	-0.049	0.213	-0.340	0.377	-1.899***	-0.230	-0.119	-0.478***	0.787*	0.292	-0.050	0.526	0.000	0.109	0.505	134
Dlnp0spl3yr83 RE	0.333	0.124	0.202	-0.122	0.167	-1.081***	-0.140	-0.079	-0.199	0.476**	0.044	0.068	0.765	0.000	0.067	0.455	137
Dlnp0splfyr30 OLS	1.886	-0.471	-0.903	0.104	-1.027	-1.653	1.290	-0.107	0.287	0.554	-1.744	-0.063	0.494	0.161	0.631	0.511	83
Dlnp0splfyr42 OLS	0.452	0.287	-1.300	0.077	0.436	-2.025*	1.179**	-0.062	-0.370	0.980	-2.023	-0.107	0.459	0.062	0.113	0.615	85
Dlnp0splfyr83 RE	0.627	0.124	-0.285	0.009	0.681	-1.300*	0.647**	-0.071	-0.454	0.628	-1.255**	0.133	0.364	0.042	0.038	0.631	87
Dlnp0hybspl3yr RE	0.329	0.360	0.044	0.004	-0.001	-1.411***	-0.093	-0.095	-0.146	0.789**	0.311	-0.050	0.873	0.004	0.086	0.397	137
Dlnp0hybsplfyr OLS	0.645	0.458	-0.941	0.176	0.673	-1.762*	0.925	-0.153	-0.450	0.883	-1.362	-0.057	0.333	0.089	0.258	0.564	87
Dlnq2spl3yr83 OLS	0.133	0.150	0.606	0.161	0.334	1.801***	0.297	-0.013	-0.293	-0.863*	-0.975	0.462	0.976	0.015	0.213	0.466	137
Dlnq2splfyr83 OLS	-0.821	0.076	0.341	0.116	0.459	1.341	-0.461	0.140	0.027	-0.384	-0.151	-0.006	0.566	0.508	0.946	0.473	87
Dlnq4spl3yr83 OLS	0.207	0.121	0.517	0.232	0.298	1.328***	0.290	-0.039	-0.207	-0.488	-0.961	0.434	0.969	0.011	0.313	0.446	137
Dlnq4splfyr83 OLS	-0.670	0.048	0.454	0.068	0.345	1.065	-0.372	0.102	0.169	-0.281	-0.201	0.088	0.583	0.540	0.889	0.460	87

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05

Appendix Table 9 BB Model, Pair-wise SGEP Comparisons by Region, Time Dummy (Wald test, p values)

Model	Agriculture						Industry						Services						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.241	0.754	0.192	0.475	0.737	0.449	0.087	0.830	0.862	0.005	0.002	0.471	0.320	0.936	0.950	0.327	0.093	0.858
Dlnp0spl3yr42	RE	0.356	0.150	0.615	0.710	0.664	0.461	0.000	0.250	0.194	0.009	0.000	0.804	0.016	0.376	0.328	0.597	0.133	0.718
Dlnp0spl3yr83	RE	0.669	0.761	0.345	0.867	0.587	0.362	0.000	0.386	0.258	0.012	0.000	0.831	0.009	0.614	0.233	0.429	0.104	0.962
Dlnp0splfyr30	OLS	0.262	0.180	0.414	0.758	0.526	0.483	0.701	0.073	0.294	0.065	0.212	0.119	0.890	0.453	0.831	0.202	0.581	0.356
Dlnp0splfyr42	OLS	0.907	0.205	0.799	0.177	0.789	0.300	0.093	0.448	0.534	0.019	0.090	0.024	0.282	0.333	0.777	0.026	0.240	0.123
Dlnp0splfyr83	RE	0.488	0.079	0.403	0.546	0.837	0.681	0.023	0.963	0.238	0.022	0.081	0.039	0.058	0.189	0.230	0.008	0.391	0.026
Dlnp0hybspl3yr	RE	0.958	0.551	0.546	0.577	0.536	0.935	0.001	0.871	0.735	0.046	0.001	0.997	0.012	0.601	0.768	0.616	0.067	0.680
Dlnp0hybsplfyr	OLS	0.815	0.074	0.569	0.156	0.718	0.225	0.025	0.816	0.261	0.047	0.093	0.133	0.078	0.459	0.548	0.107	0.199	0.245
Dlnq2spl3yr83	OLS	0.981	0.660	0.971	0.685	0.990	0.723	0.011	0.958	0.403	0.061	0.002	0.639	0.238	0.594	0.143	0.936	0.065	0.255
Dlnq2splfyr83	OLS	0.319	0.419	0.239	0.872	0.964	0.879	0.438	0.317	0.632	0.147	0.213	0.333	0.574	0.893	0.960	0.878	0.660	0.901
Dlnq4spl3yr83	OLS	0.873	0.706	0.971	0.631	0.870	0.777	0.013	0.990	0.362	0.121	0.001	0.578	0.482	0.499	0.190	0.691	0.131	0.205
Dlnq4splfyr83	OLS	0.337	0.336	0.329	0.765	0.979	0.754	0.431	0.378	0.662	0.166	0.201	0.410	0.481	0.763	0.889	0.954	0.624	0.792

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05

Appendix Table 10 BB Model: Sector\*Income-level Interactions (base = UMC)

Model		Ag×LIC	Ag×LMC	Ind×LIC	Ind×LMC	Ser×LIC	Ser×LMC	Ag Wald (p)	Ind Wald (p)	Ser Wald (p)
Dlnp0spl3yr30	RE	1.125**	0.695	0.577	0.247	0.172	0.043	0.079	0.458	0.961
Dlnp0spl3yr42	RE	0.667***	0.363	0.123	0.174	0.370	0.094	0.028	0.911	0.510
Dlnp0spl3yr83	RE	0.024	0.005	0.198	0.225	0.091	-0.134	0.983	0.558	0.421
Dlnp0splfyr30	OLS	1.139	-0.292	1.078**	0.952	-0.701	-0.552	0.015	0.046	0.492
Dlnp0splfyr42	RE	0.778*	-0.066	0.356	0.772	0.181	-0.363	0.015	0.340	0.495
Dlnp0splfyr83	RE	-0.031	-0.271	0.102	0.277	0.119	-0.153	0.079	0.590	0.546
Dlnp0hybspl3yr	RE	0.300	-0.440	0.252	0.330	0.004	-0.326	0.090	0.401	0.785
Dlnp0hybsplfyr	RE	0.398	-0.862**	0.133	0.578	-0.092	-0.559	0.002	0.489	0.665
Dlnq2spl3yr83	OLS	-1.772***	-0.089	-0.459*	-0.515	0.954*	0.325	0.000	0.173	0.153
Dlnq2splfyr83	OLS	-1.516***	0.005	-0.174	-0.177	0.251	0.062	0.017	0.765	0.920
Dlnq4spl3yr83	OLS	-1.413***	-0.024	-0.425*	-0.501	0.784*	0.336	0.001	0.101	0.181
Dlnq4splfyr83	OLS	-1.142**	0.109	-0.201	-0.232	0.212	0.142	0.068	0.592	0.901

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05

Appendix Table 11 BB Model: Pairwise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-Level, Agriculture and Industry (Wald test, p values)

	Agriculture			Industry		
	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC
Dlnp0spl3yr30	0.412	0.027	0.298	0.527	0.280	0.740
Dlnp0spl3yr42	0.441	0.008	0.413	0.897	0.682	0.723
Dlnp0spl3yr83	0.917	0.879	0.984	0.863	0.287	0.349
Dlnp0splfyr30	0.004	0.119	0.651	0.788	0.014	0.136
Dlnp0splfyr42	0.007	0.069	0.881	0.241	0.390	0.153
Dlnp0splfyr83	0.025	0.922	0.402	0.324	0.772	0.484
Dlnp0hybspl3yr	0.030	0.221	0.171	0.840	0.182	0.439
Dlnp0hybsplfyr	0.003	0.417	0.015	0.258	0.705	0.271
Dlnq2spl3yr83	0.000	0.000	0.783	0.895	0.088	0.221
Dlnq2splfyr83	0.008	0.007	0.989	0.992	0.512	0.585
Dlnq4spl3yr83	0.001	0.000	0.938	0.825	0.055	0.143
Dlnq4splfyr83	0.023	0.038	0.751	0.910	0.374	0.412

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05

Appendix Table 12 BB Model: SGEP by Income Level, Lagged Variables (Base=UMC)

model		Agriculture			Industry			Services			Ag Wald (p)	Ind Wald (p)	Ser Wald (p)	r2	N
		LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC					
Dlnp0spl3yr30	OLS	0.772**	-0.579	0.548	-0.015	-0.523	-0.936*	-0.809***	0.138	0.470	0.092	0.120	0.033	0.247	79
Dlnp0spl3yr42	RE	0.196	-0.144	0.481	0.002	-0.459	-0.110	-0.320**	0.443	-0.280	0.656	0.475	0.495	0.145	84
Dlnp0spl3yr83	RE	-0.027	-0.177	0.152	0.009	-0.270	0.018	-0.039***	0.358	-0.032	0.599	0.708	0.731	0.161	86
Dlnp0splfyr30	FE	0.092***	0.730***	6.512***	0.025***	-0.628***	-1.395***	-0.265***	-0.244	-4.250***	0.000	0.000	0.000	0.904	37
Dlnp0splfyr42	OLS	0.050	-0.344	0.057	0.009	0.370	-0.872*	-0.312***	-0.853	0.417	0.842	0.153	0.071	0.299	40
Dlnp0splfyr83	RE	-0.008	-0.164	-0.191	0.021*	0.173	-0.233	-0.069**	-0.264	0.065	0.778	0.419	0.774	0.233	42
Dlnp0hybspl3yr	RE	0.770**	-0.190	0.119	-0.030	-0.382	0.046	-0.689**	0.293	-0.064	0.191	0.648	0.209	0.063	86
Dlnp0hybsplfyr	RE	0.081**	-0.306	-0.391	0.010	0.114	-0.309	-0.272***	-0.640	0.083	0.638	0.594	0.486	0.109	42
Dlnq2spl3yr83	OLS	-0.314	0.427	-0.067	-0.141	0.358	0.281	0.227	0.007	-0.133	0.497	0.320	0.666	0.147	86
Dlnq2splfyr83	OLS	0.614	0.248	-0.055	-0.075	0.161	0.087	-0.659*	-0.203	0.027	0.526	0.704	0.200	0.250	42
Dlnq4spl3yr83	OLS	-0.346	0.398	-0.156	-0.040	0.335	0.237	0.291	-0.048	-0.023	0.353	0.409	0.524	0.162	86
Dlnq4splfyr83	OLS	0.326	0.240*	-0.283	0.029	0.112	0.066	-0.328	-0.274	0.145	0.339	0.934	0.119	0.274	42

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05

Appendix Table 13 BB Model: Pairwise SGEP Comparisons by Income Level,  
Lagged Variables (Wald test, p values)

Model		Agriculture			Industry			Services		
		LIC- LMC	LIC- UMC	LMC- UMC	LIC- LMC	LIC- UMC	LMC- UMC	LIC- LMC	LIC- UMC	LMC- UMC
Dlnp0spl3yr30	OLS	0.031	0.768	0.190	0.258	0.083	0.546	0.069	0.028	0.633
Dlnp0spl3yr42	RE	0.500	0.563	0.359	0.240	0.677	0.447	0.236	0.925	0.334
Dlnp0spl3yr83	RE	0.504	0.450	0.312	0.406	0.973	0.508	0.429	0.982	0.523
Dlnp0splfyr30	FE	0.000	0.000	0.000	0.000	0.000	0.000	0.915	0.000	0.000
Dlnp0splfyr42	OLS	0.562	0.991	0.649	0.465	0.074	0.077	0.622	0.026	0.266
Dlnp0splfyr83	RE	0.557	0.686	0.960	0.330	0.376	0.213	0.605	0.625	0.478
Dlnp0hybspl3yr	RE	0.114	0.122	0.574	0.392	0.810	0.373	0.164	0.163	0.629
Dlnp0hybsplfyr	RE	0.577	0.443	0.926	0.761	0.330	0.371	0.687	0.258	0.454
Dlnq2spl3yr83	OLS	0.241	0.634	0.416	0.215	0.185	0.838	0.684	0.373	0.795
Dlnq2splfyr83	OLS	0.448	0.262	0.471	0.422	0.600	0.819	0.366	0.083	0.535
Dlnq4spl3yr83	OLS	0.154	0.639	0.274	0.246	0.281	0.755	0.437	0.322	0.957
Dlnq4splfyr83	OLS	0.776	0.181	0.166	0.715	0.890	0.870	0.876	0.092	0.131

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
Bolded values represent p<0.05

Appendix Table 14 BB Model: SGEP by Income Level, Time Dummy Variables (Base=UMC)

model	Agriculture			Industry			Services			Ag Wald (p)	Ind Wald (p)	Ser Wald (p)	r2	N
	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC					
Dlnp0spl3yr30 OLS	0.586	-0.595*	-0.420	-0.418*	-0.724	-0.976*	0.115	0.144	0.250	0.140	0.604	0.971	0.388	143
Dlnp0spl3yr42 RE	0.368	-0.484	-0.462	-0.149	-0.453	-0.234	-0.264	0.180	-0.450**	0.252	0.766	0.506	0.353	148
Dlnp0spl3yr83 RE	-0.011	-0.030	0.119	-0.116	-0.116	-0.340**	0.092	-0.093	0.011	0.890	0.533	0.783	0.335	151
Dlnp0splfyr30 FE	0.461	-0.741***	-0.034	-0.300	-0.395	-0.958**	0.098	-0.349	0.268	0.135	0.282	0.877	0.423	92
Dlnp0splfyr42 OLS	-0.100	-0.975***	-0.236	-0.076	0.198	-0.335	0.494	-0.531	-0.132	0.069	0.709	0.174	0.438	96
Dlnp0splfyr83 RE	-0.504	-0.253	0.153	-0.155	0.081	-0.218	0.707	-0.307	-0.038	0.482	0.546	0.204	0.433	98
Dlnp0hybspl3yr RE	0.470	-0.542	0.226	-0.070	-0.118	-0.367**	-0.097	-0.137	0.029	0.128	0.384	0.926	0.276	151
Dlnp0hybsplfyr RE	-0.073	-0.830***	0.273	-0.073	0.338	-0.151	0.711	-0.672	-0.048	0.011	0.637	0.164	0.359	98
Dlnq2spl3yr83 OLS	-1.106**	0.441	0.311	0.224	0.219	0.433**	0.446	0.173	-0.191	0.022	0.793	0.514	0.338	151
Dlnq2splfyr83 OLS	-0.543	0.514	0.010	0.181	0.214	0.105	-0.207	0.482	0.183	0.136	0.923	0.411	0.427	98
Dlnq4spl3yr83 OLS	-0.878**	0.442	0.227	0.191	0.143	0.391**	0.427	0.243	-0.100	0.037	0.673	0.498	0.359	151
Dlnq4splfyr83 OLS	-0.457	0.421	-0.090	0.163	0.141	0.123	-0.106	0.572*	0.184	0.162	0.988	0.281	0.445	98

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 Bolded values represent p<0.05

Appendix Table 15 BB Model: Pairwise SGEP Comparisons by Income Level,  
Time Dummy Variables (Wald test, p values)

Model	Agriculture			Industry			Services		
	LIC- LMC	LIC- UMC	LMC- UMC	LIC- LMC	LIC- UMC	LMC- UMC	LIC- LMC	LIC- UMC	LMC- UMC
Dlnp0spl3yr30 OLS	0.978	0.816	0.912	0.049	0.181	0.761	0.599	0.370	0.755
Dlnp0spl3yr42 RE	0.468	0.676	0.246	0.144	0.125	0.964	0.496	0.765	0.673
Dlnp0spl3yr83 RE	0.518	0.678	0.733	0.951	0.681	0.662	0.998	0.266	0.423
Dlnp0splfyr30 FE	0.737	0.860	0.611	0.058	0.601	0.379	0.877	0.116	0.452
Dlnp0splfyr42 OLS	0.097	0.274	0.608	0.029	0.822	0.193	0.574	0.528	0.412
Dlnp0splfyr83 RE	0.083	0.288	0.549	0.560	0.287	0.241	0.370	0.864	0.385
Dlnp0hybspl3yr RE	0.946	0.764	0.753	0.066	0.595	0.076	0.912	0.167	0.602
Dlnp0hybsplfyr RE	0.057	0.295	0.358	0.146	0.585	0.006	0.383	0.844	0.376
Dlnq2spl3yr83 OLS	0.719	0.295	0.522	0.008	0.012	0.733	0.991	0.543	0.663
Dlnq2splfyr83 OLS	0.235	0.542	0.437	0.049	0.326	0.302	0.935	0.821	0.715
Dlnq4spl3yr83 OLS	0.781	0.323	0.456	0.012	0.026	0.514	0.913	0.462	0.537
Dlnq4splfyr83 OLS	0.179	0.604	0.280	0.072	0.491	0.244	0.948	0.885	0.939

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
Bolded values represent p<0.05

## A.2 Extended Service Sector Model

Appendix Table 16 ESS Model: Diagnostics

Model	Variance Inflation Factor (VIF)						Outliers Regression (rreg)					
	Ag	Ind	Trd	Trn	Bus	Oth	Ag	Ind	Trd	Trn	Bus	Oth
Dlnp0spl3yr30 RE	1.202	1.933	2.792	1.759	1.381	1.574	0.079	-0.046	0.282	-0.610	0.170	-0.304
Dlnp0spl3yr42 FE	1.202	1.860	2.471	1.681	1.385	1.533	-0.058	0.043	-0.044	-0.376	0.169	-0.218
Dlnp0spl3yr83 RE	1.201	1.850	2.471	1.678	1.379	1.534	-0.050	-0.027	-0.081	-0.114	0.056	0.013
Dlnp0splfyr30 OLS	1.145	1.742	2.405	1.974	1.703	2.210	-0.656	0.034	0.359	-0.099	-0.049	-0.438
Dlnp0splfyr42 RE	1.387	1.377	1.706	1.222	1.246	1.294	0.515	-0.109	-0.152	0.264	0.077	-0.438
Dlnp0splfyr83 RE	1.401	1.383	1.720	1.237	1.247	1.277	-0.107	0.055	-0.014	-0.058	0.072	-0.115
Dlnp0hybspl3yr FE	1.201	1.850	2.471	1.678	1.379	1.534	0.089	0.032	0.011	-0.374	0.084	-0.114
Dlnp0hybsplfyr RE	1.401	1.383	1.720	1.237	1.247	1.277	-0.037	0.111	-0.294	-0.143	0.097	-0.584
Dlnq2spl3yr83 OLS	1.095	2.034	2.748	1.940	1.793	1.985	0.186	0.053	-0.271	0.192	0.044	0.177
Dlnq2splfyr83 OLS	1.114	1.702	2.213	1.859	1.704	2.143	0.194	-0.059	-0.287	0.148	0.002	0.453
Dlnq4spl3yr83 OLS	1.095	2.034	2.748	1.940	1.793	1.985	0.203	0.045	-0.165	0.195	0.019	0.180
Dlnq4splfyr83 OLS	1.114	1.702	2.213	1.859	1.704	2.143	0.174	-0.044	-0.179	0.122	-0.024	0.462

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr=spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day. Bolded items represent possible sign flips due to outliers in Table 8.

Appendix Table 17 ESS Model: SGEP Lagged Variables

	Model	Ag	Ind	Trd	Trn	Bus	Oth	BPLM (p)	AW (p)	r <sup>2</sup>	N
Dlnp0spl3yr30	OLS	-0.234	-0.283	0.282	0.050	-0.335	0.140	0.158	n/a	0.814	0.058
Dlnp0spl3yr42	RE	0.232	-0.085	0.112	0.031	-0.051	-0.218	0.000	0.672	0.812	0.006
Dlnp0spl3yr83	RE	0.004	0.069	-0.118	0.108	-0.043	0.058	0.000	0.997	0.880	0.016
Dlnp0splfyr30	OLS	-0.580	-0.150	1.004***	-0.485**	-0.511**	0.355	0.489	n/a	0.010	0.266
Dlnp0splfyr42	OLS	-0.746*	-0.202	1.563**	-0.596**	-0.709*	0.330	0.310	n/a	0.173	0.338
Dlnp0splfyr83	RE	-0.388**	0.028	0.330	-0.293*	-0.200	0.164	0.000	0.744	0.052	0.023
Dlnp0hybspl3yr	RE	0.215	0.031	-0.071	0.063	-0.033	-0.082	0.016	0.701	0.965	0.002
Dlnp0hybsplfyr	RE	-0.635**	-0.040	0.675*	-0.461*	-0.336*	0.141	0.009	0.784	0.117	0.083
Dlnq2spl3yr83	OLS	0.093	0.070	0.105	0.006	-0.137	0.123	0.452	n/a	0.746	0.036
Dlnq2splfyr83	OLS	0.220	0.028	-0.215	0.243*	0.033	-0.117	1.000	n/a	0.220	0.060
Dlnq4spl3yr83	OLS	0.047	0.073	0.060	0.034	-0.105	0.155	0.478	n/a	0.694	0.041
Dlnq4splfyr83	OLS	0.101	0.032	-0.222	0.252**	0.045	-0.041	1.000	n/a	0.218	0.069

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day  
Trd=trade; Trn=transport; Bus=business; Oth=other services.

Appendix Table 18 ESS Model: SGEP Time Dummy Variable

	Model	Ag	Ind	Trd	Trn	Bus	Oth	BPLM (p)	AW (p)	r2	N
Dlnp0spl3yr30	FE	0.360	-0.437*	0.282	-0.306	0.163	-0.307	0.014	0.000	0.113	0.479
Dlnp0spl3yr42	FE	-0.022	-0.074	-0.383	-0.208	0.122	0.170	0.000	0.000	0.255	0.469
Dlnp0spl3yr83	FE	0.327	-0.107	-0.213	-0.086	-0.009	0.207	0.000	0.000	0.325	0.432
Dlnp0splfyr30	OLS	-0.198	-0.338	0.670	-0.090	-0.078	-0.598	0.078	n/a	0.355	0.287
Dlnp0splfyr42	FE	-0.335	0.164	-0.502	0.165	0.262*	0.648*	0.001	0.000	0.075	0.831
Dlnp0splfyr83	FE	-0.410*	-0.218*	0.356	0.265	-0.136	0.104	0.000	0.000	0.435	0.800
Dlnp0hybspl3yr	FE	0.441*	-0.074	-0.261	-0.022	0.006	0.227	0.000	0.000	0.182	0.411
Dlnp0hybsplfyr	FE	-0.341	-0.051	0.006	0.383	-0.121	0.221	0.000	0.000	0.537	0.780
Dlnq2spl3yr83	OLS	0.207	0.172	-0.193	0.074	-0.062	0.266	0.449	n/a	0.609	0.259
Dlnq2splfyr83	OLS	0.144	0.119	-0.316	0.135	-0.020	0.386	0.270	n/a	0.743	0.347
Dlnq4spl3yr83	OLS	0.192	0.123	-0.132	0.108	-0.086	0.301	0.436	n/a	0.336	0.280
Dlnq4splfyr83	OLS	0.081	0.095	-0.273	0.114	-0.045	0.460*	0.158	n/a	0.606	0.366

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day  
Trd=trade; Trn=transport; Bus=business; Oth=other services.  
Bolded items represent possible sign flips due to outliers (see Appendix Table 16)

Appendix Table 19 ESS Model: Sector\*Region Interactions (base = EAP)

	Model	Ag×LAC	Ag×SAS	Ag×SSA	Ind×LAC	Ind×SAS	Ind×SSA	Trd×LAC	Trd×SAS	Trd×SSA	Trn×LAC	Trn×SAS	Trn×SSA
Dlnp0spl3yr30	OLS	1.820*	1.161	2.021***	-2.641***	-0.192	-0.323	-1.655	-1.317	-1.477*	0.832	0.145	0.957
Dlnp0spl3yr42	RE	1.596**	1.193***	1.219***	-2.121***	-0.493	-0.615**	-0.347	-0.372	-0.282	0.476	0.196	0.587
Dlnp0spl3yr83	RE	-0.173	-0.110	-0.214	-0.902***	0.134	-0.091	0.042	-0.312	0.027	-0.454	-0.401	-0.245
Dlnp0splfyr30	OLS	-0.223	-1.157	0.374	-1.912	0.028	-0.095	-2.968	-1.136	-1.358	1.369	0.637	0.988
Dlnp0splfyr42	OLS	0.477	-0.151	0.824	-2.304**	-0.304	-0.580**	-2.456	-1.487	-1.416	0.489	-0.139	0.213
Dlnp0splfyr83	OLS	-0.687	-0.883	-0.639	-1.489*	-0.099	-0.431	-0.148	-0.119	0.318	-0.715	-0.975	-0.853
Dlnp0hybspl3yr	RE	0.154	-0.357	-0.062	-1.385**	0.049	-0.182	0.164	0.007	0.291	-0.124	-0.650	-0.113
Dlnp0hybsplfyr	OLS	-0.336	-1.477	-0.435	-1.810*	-0.109	-0.489	0.245	0.622	0.845	-0.878	-1.409	-1.054
Dlnq2spl3yr83	OLS	-0.522	0.187	-0.597	1.773***	-0.352	-0.086	0.762	0.652**	-0.163	-0.536	-0.183	-0.177
Dlnq2splfyr83	OLS	0.033	0.615	-0.270	1.825	-0.027	0.326	1.376	-0.061	-0.893	-0.446	0.325	0.383
Dlnq4spl3yr83	OLS	-0.476	0.046	-0.534	1.234**	-0.378	-0.105	0.800*	0.725***	-0.047	-0.338	-0.170	-0.246
Dlnq4splfyr83	OLS	-0.026	0.598	-0.249	1.438	0.036	0.260	1.088	-0.163	-0.695	-0.242	0.266	0.253
		Bus×LAC	Bus×SAS	Bus×SSA	Oth×LAC	Oth×SAS	Oth×SSA	Ag Wald (p)	Ind Wald (p)	Trd Wald (p)	Trn Wald (p)	Bus Wald (p)	Oth Wald (p)
Dlnp0spl3yr30	OLS	-0.430	0.270	-0.310	2.570***	2.075**	0.857*	0.017	0.020	0.289	0.493	0.004	0.001
Dlnp0spl3yr42	RE	-0.575**	0.040	-0.280**	2.088***	1.259***	0.667**	0.003	0.007	0.835	0.415	0.011	0.000
Dlnp0spl3yr83	RE	-0.054	0.193	0.009	0.727**	0.202	0.203	0.908	0.016	0.374	0.401	0.244	0.238
Dlnp0splfyr30	OLS	0.068	0.127	-0.099	2.428*	1.212	0.534	0.529	0.489	0.548	0.799	0.829	0.216
Dlnp0splfyr42	OLS	-0.108	-0.132	-0.247	2.463***	1.299**	1.116*	0.603	0.027	0.469	0.857	0.691	0.051
Dlnp0splfyr83	OLS	-0.087	-0.139	-0.244	1.125*	0.517	0.659	0.619	0.176	0.466	0.471	0.478	0.280
Dlnp0hybspl3yr	RE	-0.115	0.228	-0.231	0.799*	0.714	0.121	0.877	0.078	0.781	0.742	0.007	0.084
Dlnp0hybsplfyr	OLS	-0.292	-0.336	-0.501*	1.401*	0.747	0.469	0.431	0.175	0.504	0.512	0.222	0.245
Dlnq2spl3yr83	OLS	-0.042	-0.257	0.205	-1.234**	-0.911*	0.720	0.359	0.012	0.068	0.684	0.307	0.008
Dlnq2splfyr83	OLS	-0.075	-0.132	0.263	-1.930***	-1.633***	0.138	0.778	0.376	0.084	0.513	0.339	0.003
Dlnq4spl3yr83	OLS	-0.070	-0.282*	0.159	-1.028**	-0.886**	0.641	0.474	0.015	0.026	0.776	0.224	0.005
Dlnq4splfyr83	OLS	-0.120	-0.114	0.188	-1.599**	-1.515***	0.155	0.786	0.404	0.064	0.638	0.367	0.003

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05

Appendix Table 20 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Region, Agriculture and Industry (Wald test, p values)

	Agriculture						Industry					
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA
Dlnp0spl3yr30	0.067	0.136	0.002	0.518	0.825	0.214	0.004	0.814	0.529	0.014	0.003	0.838
Dlnp0spl3yr42	0.032	0.007	0.001	0.604	0.609	0.951	0.001	0.118	0.021	0.010	0.013	0.542
Dlnp0spl3yr83	0.780	0.767	0.573	0.904	0.939	0.544	0.007	0.481	0.508	0.002	0.008	0.099
Dlnp0splfyr30	0.902	0.548	0.830	0.431	0.489	0.153	0.180	0.979	0.904	0.172	0.129	0.875
Dlnp0splfyr42	0.720	0.911	0.511	0.478	0.627	0.206	0.021	0.577	0.016	0.065	0.072	0.586
Dlnp0splfyr83	0.443	0.268	0.418	0.695	0.923	0.365	0.067	0.847	0.335	0.056	0.115	0.208
Dlnp0hybspl3yr	0.826	0.502	0.866	0.485	0.729	0.486	0.021	0.855	0.202	0.023	0.040	0.333
Dlnp0hybsplfyr	0.753	0.173	0.617	0.219	0.883	0.129	0.071	0.851	0.115	0.114	0.163	0.449
Dlnq2spl3yr83	0.449	0.799	0.105	0.463	0.917	0.309	0.006	0.364	0.799	0.001	0.003	0.406
Dlnq2splfyr83	0.969	0.550	0.677	0.581	0.661	0.334	0.106	0.968	0.397	0.133	0.167	0.569
Dlnq4spl3yr83	0.372	0.940	0.163	0.488	0.918	0.375	0.015	0.295	0.727	0.002	0.004	0.335
Dlnq4splfyr83	0.972	0.532	0.708	0.495	0.711	0.318	0.103	0.953	0.457	0.150	0.155	0.679

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05

Appendix Table 21 ESS Model: SGEP by Region, Lagged Variables

		Agriculture				Industry				Trade				Transportation			
Model		EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA
Dlnp0spl3yr30	OLS	-1.523**	1.039	1.563**	0.810**	-0.265	-1.666**	-0.097	0.104	0.818	1.687*	0.387	-0.125	-0.366	-0.980*	1.785***	0.109
Dlnp0spl3yr42	OLS	-1.980	0.591	0.151	0.465**	-0.167	-1.384***	-0.199	0.072	0.848	1.306**	0.575	-0.109	-0.058	-0.632**	1.220***	0.082
Dlnp0spl3yr83	OLS	-1.748***	0.417	-0.409	0.112	0.619	-1.098*	-0.041	0.042	-0.227	1.085***	0.224	-0.018	0.167	-0.390**	-0.315	-0.009
Dlnp0hybspl3yr	OLS	-1.190*	0.448	0.151	0.812***	0.549	-1.114*	-0.199	0.094	-0.222	1.120***	0.575	-0.291	0.057	-0.410**	1.220***	0.286
Dlnq2spl3yr83	OLS	0.054	-0.065	-0.930***	-0.376	0.064	1.221***	0.492*	-0.014	0.267*	-0.901***	-0.342*	0.155	0.002	0.445	0.395***	0.061
Dlnq4spl3yr83	OLS	0.101	-0.056	-0.689***	-0.404	0.035	0.995**	0.451	0.019	0.264*	-0.890***	-0.386	0.102	0.042	0.443*	0.359***	0.047
		Business				Other				p values							
Model		EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	Ag Wald	Ind Wald	Trd Wald	Trn Wald	Bus Wald	Oth Wald	r2	N
Dlnp0spl3yr30	OLS	0.393	-1.361***	0.360	0.067	-0.509	2.633***	-0.853***	-0.809***	0.010	0.046	0.320	0.002	0.001	0.001	0.433	75
Dlnp0spl3yr42	OLS	0.705	-0.785***	0.206	-0.043	-0.284	1.554**	-0.025	-0.374**	0.432	0.010	0.055	0.007	0.000	0.060	0.457	78
Dlnp0spl3yr83	OLS	0.516	-0.478***	0.038	-0.042	-0.116	0.934	0.143	-0.002	0.023	0.217	0.034	0.266	0.004	0.394	0.471	80
Dlnp0hybspl3yr	OLS	0.551	-0.465***	0.206	0.102	-0.047	0.899	-0.025	-0.802***	0.024	0.207	0.060	0.001	0.001	0.012	0.468	80
Dlnq2spl3yr83	OLS	-0.292	0.433***	-0.046	-0.433**	0.231	-1.458**	0.434***	0.876	0.114	0.037	0.004	0.289	0.001	0.032	0.340	80
Dlnq4spl3yr83	OLS	-0.247	0.307**	0.000	-0.311***	0.244	-1.081*	0.300***	0.792*	0.169	0.119	0.001	0.450	0.008	0.127	0.324	80

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05.

Appendix Table 22 Pairwise SGEP Comparisons by Region,  
Lagged Variables (Wald test, p values)

Model	Agriculture						Industry						Trade						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.06	0.00	0.00	0.69	0.85	0.30	0.06	0.90	0.35	0.28	0.01	0.88	0.48	0.79	0.29	0.45	0.09	0.73
Dlnp0spl3yr42	OLS	0.15	0.21	0.15	0.55	0.85	0.44	0.05	0.97	0.61	0.20	0.00	0.74	0.54	0.79	0.11	0.48	0.02	0.46
Dlnp0spl3yr83	OLS	0.00	0.09	0.01	0.17	0.43	0.27	0.07	0.38	0.42	0.09	0.06	0.66	0.05	0.43	0.70	0.05	0.01	0.30
Dlnp0hybspl3yr	OLS	0.03	0.06	0.00	0.57	0.43	0.13	0.08	0.49	0.53	0.37	0.05	0.72	0.04	0.44	0.91	0.58	0.01	0.37
Dlnq2spl3yr83	OLS	0.87	0.04	0.54	0.16	0.70	0.35	0.03	0.30	0.81	0.16	0.01	0.11	0.00	0.01	0.86	0.12	0.13	0.44
Dlnq4spl3yr83	OLS	0.78	0.06	0.43	0.15	0.59	0.59	0.07	0.31	0.96	0.30	0.03	0.19	0.00	0.04	0.78	0.16	0.12	0.45
Model	Transport						Business						Other						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.51	0.09	0.57	0.19	0.08	0.00	0.04	0.97	0.68	0.00	0.00	0.36	0.00	0.63	0.68	0.00	0.00	0.90
Dlnp0spl3yr42	OLS	0.55	0.23	0.88	0.14	0.06	0.00	0.01	0.35	0.16	0.00	0.00	0.14	0.09	0.76	0.91	0.04	0.01	0.26
Dlnp0spl3yr83	OLS	0.49	0.56	0.83	0.79	0.07	0.24	0.01	0.19	0.13	0.00	0.00	0.31	0.18	0.64	0.82	0.20	0.11	0.52
Dlnp0hybspl3yr	OLS	0.57	0.14	0.78	0.01	0.01	0.00	0.01	0.39	0.25	0.00	0.00	0.52	0.21	0.97	0.14	0.15	0.01	0.02
Dlnq2spl3yr83	OLS	0.22	0.08	0.89	0.86	0.43	0.40	0.01	0.32	0.64	0.00	0.00	0.03	0.02	0.54	0.30	0.01	0.01	0.41
Dlnq4spl3yr83	OLS	0.21	0.18	0.99	0.72	0.38	0.43	0.05	0.30	0.80	0.05	0.00	0.01	0.07	0.87	0.33	0.03	0.02	0.30

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05.

Appendix Table 23 ESS Model: SGEP by Region, Time Dummy Variables

Model	Agriculture				Industry				Trade				Transportation				
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	
Dlnp0spl3yr30	OLS	-1.513**	-0.308	-0.716	-0.192	0.029	-2.521**	0.692	-0.127	2.064**	0.335	-0.294	0.376	-1.506*	0.079	-1.316	-0.040
Dlnp0spl3yr42	OLS	-1.366**	-0.216	0.155	-0.260	0.867*	-2.072***	0.829	-0.131	0.802	0.322	-1.030	0.196	-1.428**	0.020	-0.955	-0.087
Dlnp0spl3yr83	RE	0.447	0.176	-0.088	-0.086	-0.032	-0.832***	-0.053	-0.058	0.092	0.150	-0.424	-0.013	0.162	-0.353	0.239	-0.055
Dlnp0hybspl3yr	RE	0.329	0.389	-0.261	0.045	-0.128	-1.273**	0.237	-0.061	0.141	0.235	-0.452	0.174	-0.014	-0.130	-0.308	-0.153
Dlnq2spl3yr83	OLS	0.153	0.157	0.204	0.106	0.414	1.624**	-0.545	0.057	-0.845**	0.121	0.800*	-0.449	0.606*	-0.199	0.072	-0.013
Dlnq4spl3yr83	OLS	0.207	0.193	0.187	0.154	0.391	1.035**	-0.559	0.032	-0.760**	0.187	0.811*	-0.362	0.542	0.067	0.125	-0.067
Model	Business				Other				p values						r2	N	
	EAP	LAC	SAS	SSA	EAP	LAC	SAS	SSA	Ag Wald	Ind Wald	Trd Wald	Trn Wald	Bus Wald	Oth Wald			
Dlnp0spl3yr30	OLS	0.383	-0.047	0.811**	-0.137	-1.152**	1.155*	0.798	-0.167	0.561	0.067	0.295	0.229	0.202	0.056	0.585	131
Dlnp0spl3yr42	OLS	0.353*	-0.043	0.689**	-0.079	-0.631*	1.138**	0.119	0.084	0.150	0.007	0.526	0.217	0.115	0.002	0.624	134
Dlnp0spl3yr83	RE	-0.048	-0.354	0.180	0.034	-0.201	1.188**	0.255	0.048	0.739	0.095	0.588	0.476	0.190	0.016	0.408	137
Dlnp0hybspl3yr	RE	0.153	-0.179	0.465***	-0.059	-0.302	1.028**	0.448	-0.047	0.778	0.133	0.506	0.965	0.011	0.017	0.419	137
Dlnq2spl3yr83	OLS	-0.186	0.014	-0.614**	0.038	0.188	-0.962**	0.086	0.928*	1.000	0.037	0.008	0.435	0.214	0.016	0.558	137
Dlnq4spl3yr83	OLS	-0.192*	-0.017	-0.678***	-0.002	0.241	-0.648*	0.033	0.917**	1.000	0.077	0.003	0.560	0.053	0.011	0.559	137

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05.

Appendix Table 24 Pairwise SGEP Comparisons by Region,  
Time Dummy Variables (Wald test, p values)

Model	Agriculture						Industry						Trade						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.23	0.50	0.21	0.70	0.91	0.66	0.10	0.68	0.87	0.01	0.02	0.41	0.22	0.20	0.07	0.71	0.96	0.66
Dlnp0spl3yr42	OLS	0.14	0.03	0.24	0.64	0.95	0.62	0.00	0.97	0.08	0.00	0.01	0.20	0.64	0.18	0.41	0.22	0.83	0.25
Dlnp0spl3yr83	RE	0.64	0.40	0.28	0.69	0.63	1.00	0.05	0.96	0.92	0.05	0.01	0.99	0.86	0.21	0.67	0.19	0.56	0.24
Dlnp0hybspl3yr	RE	0.93	0.36	0.64	0.41	0.59	0.66	0.07	0.48	0.82	0.03	0.02	0.47	0.82	0.21	0.93	0.18	0.89	0.17
Dlnq2spl3yr83	OLS	0.99	0.96	0.94	0.97	0.95	0.94	0.08	0.11	0.42	0.01	0.02	0.26	0.11	0.00	0.32	0.33	0.32	0.03
Dlnq4spl3yr83	OLS	0.98	0.98	0.93	0.99	0.95	0.97	0.23	0.07	0.33	0.01	0.06	0.18	0.04	0.00	0.27	0.25	0.21	0.02
Model	Transport						Business						Other						
	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	EAP-LAC	EAP-SAS	EAP-SSA	LAC-SAS	LAC-SSA	SAS-SSA	
Dlnp0spl3yr30	OLS	0.10	0.89	0.11	0.26	0.86	0.22	0.45	0.34	0.13	0.15	0.85	0.05	0.01	0.11	0.19	0.77	0.08	0.36
Dlnp0spl3yr42	OLS	0.08	0.62	0.07	0.25	0.81	0.22	0.31	0.34	0.08	0.07	0.92	0.05	0.00	0.31	0.17	0.18	0.07	0.95
Dlnp0spl3yr83	RE	0.25	0.87	0.49	0.15	0.31	0.45	0.24	0.18	0.50	0.04	0.18	0.39	0.00	0.28	0.35	0.17	0.04	0.59
Dlnp0hybspl3yr	RE	0.79	0.64	0.71	0.76	0.94	0.79	0.13	0.08	0.20	0.01	0.63	0.01	0.00	0.16	0.44	0.39	0.04	0.33
Dlnq2spl3yr83	OLS	0.13	0.30	0.18	0.65	0.65	0.87	0.34	0.15	0.33	0.05	0.92	0.07	0.02	0.88	0.20	0.20	0.00	0.28
Dlnq4spl3yr83	OLS	0.28	0.36	0.17	0.90	0.67	0.68	0.30	0.05	0.37	0.01	0.95	0.03	0.03	0.72	0.21	0.32	0.00	0.19

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
EAP=East Asia & Pacific; LAC=Latin America & Caribbean; SAS=South Asia; SSA=Sub-Saharan Africa  
Bolded values represent p<0.05.

Appendix Table 25 ESS Model: Sector\*Income-level Interactions (base = UMC)

		Ag×LIC	Ag×LMC	Ind×LIC	Ind×LMC	Trd×LIC	Trd×LMC	Trn×LIC (	Trn×LMC	Bus×LIC
Dlnp0spl3yr30	RE	0.961	0.934	0.759**	0.407	-0.229	0.058	-0.062	0.035	-0.499***
Dlnp0spl3yr42	RE	0.603**	0.341	0.144	0.134	0.237	-0.040	0.058	0.347	-0.395***
Dlnp0spl3yr83	RE	0.066	-0.019	0.202	0.180	0.173	0.164	0.004	0.040	-0.096
Dlnp0splfyr30	OLS	1.237*	-0.250	1.031**	0.840	0.098	0.543	0.443	0.538	-0.462**
Dlnp0splfyr42	RE	0.850**	-0.228	0.454	0.774*	0.203	0.111	0.160	0.274	-0.581***
Dlnp0splfyr83	RE	-0.048	-0.437	0.213	0.330	0.525	0.615	-0.389	-0.312	-0.248**
Dlnp0hybspl3yr	RE	0.146	-0.495	0.213	0.218	0.473	0.082	-0.308	0.177	-0.288**
Dlnp0hybsplfyr	RE	0.451	-1.138**	0.181	0.534	0.505	0.471	-0.292	-0.057	-0.315**
Dlnq2spl3yr83	OLS	-1.420***	-0.247	-0.272	-0.391	-0.696	-0.425	0.190	-0.123	0.338**
Dlnq2splfyr83	OLS	-1.026	-0.089	-0.085	-0.217	-1.264	-0.904	0.381	0.081	0.520**
Dlnq4spl3yr83	OLS	-1.165**	-0.191	-0.255	-0.390	-0.513	-0.276	-0.036	-0.212	0.358**
Dlnq4splfyr83	OLS	-0.844	0.026	-0.129	-0.280	-0.929	-0.691	0.107	-0.029	0.540***
		Bus×LMC	Oth×LIC	Oth×LMC	Ag Wald (p)	Ind Wald (p)	Trd Wald (p)	Trn Wald (p)	Bus Wald (p)	Oth Wald (p)
Dlnp0spl3yr30	RE	-0.193	0.940	0.271	0.254	0.071	0.873	0.973	0.013	0.214
lnp0spl3yr42	RE	-0.227	0.561*	0.265	0.097	0.882	0.664	0.535	0.001	0.188
Dlnp0spl3yr83	RE	-0.079	-0.015	-0.157	0.865	0.517	0.789	0.951	0.493	0.408
Dlnp0splfyr30	OLS	-0.429	-0.560	-0.610	0.033	0.045	0.717	0.666	0.055	0.683
Dlnp0splfyr42	RE	-0.666**	0.635	0.424	0.005	0.232	0.918	0.812	0.000	0.324
Dlnp0splfyr83	RE	-0.312*	0.128	-0.034	0.026	0.584	0.647	0.603	0.088	0.289
Dlnp0hybspl3yr	RE	-0.100	0.069	-0.287	0.359	0.497	0.603	0.448	0.049	0.518
Dlnp0hybsplfyr	RE	-0.407	-0.196	-0.273	0.001	0.417	0.752	0.693	0.037	0.820
Dlnq2spl3yr83	OLS	-0.050	0.946**	0.896*	0.032	0.329	0.513	0.632	0.075	0.038
Dlnq2splfyr83	OLS	0.131	0.375	0.635	0.619	0.825	0.257	0.866	0.067	0.393
Dlnq4spl3yr83	OLS	-0.039	0.773**	0.811**	0.051	0.211	0.638	0.453	0.036	0.024
Dlnq4splfyr83	OLS	0.163	0.297	0.557	0.675	0.616	0.267	0.970	0.026	0.371

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05

Appendix Table 26 ESS Model: Pair-wise Differences in Sectoral Growth (semi)-Elasticities of Poverty by Income-Level, Agriculture and Industry (Wald test, p values)

	Agriculture			Industry		
	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC
Dlnp0spl3yr30	0.965	0.107	0.218	0.561	0.026	0.556
Dlnp0spl3yr42	0.580	0.032	0.509	0.979	0.616	0.775
Dlnp0spl3yr83	0.683	0.715	0.944	0.872	0.255	0.416
Dlnp0splfyr30	0.011	0.099	0.713	0.733	0.014	0.221
Dlnp0splfyr42	0.003	0.036	0.614	0.266	0.212	0.088
Dlnp0splfyr83	0.007	0.908	0.310	0.419	0.517	0.357
Dlnp0hybspl3yr	0.174	0.682	0.213	0.990	0.237	0.568
Dlnp0hybsplfyr	0.001	0.451	0.015	0.242	0.584	0.219
Dlnq2spl3yr83	0.030	0.009	0.370	0.777	0.205	0.330
Dlnq2splfyr83	0.372	0.332	0.798	0.711	0.733	0.548
Dlnq4spl3yr83	0.044	0.016	0.433	0.684	0.164	0.203
Dlnq4splfyr83	0.378	0.396	0.930	0.624	0.549	0.355

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent  $p < 0.05$

Appendix Table 27 ESS Model: SGEP by Income-Level, Lagged Variables

		Agriculture			Industry			Trade			Transport			Bus
Model		LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC
Dlnp0spl3yr30	OLS	0.912***	-0.445	0.470	0.071	-0.333	-1.011*	-0.378	0.094	0.232	0.510**	-0.439	0.280	0.100
Dlnp0spl3yr42	OLS	0.298***	-0.354	0.597	0.059*	-0.137	-0.875**	-0.168	0.516	0.410	0.294**	-0.337	0.072	0.007
Dlnp0spl3yr83	RE	-0.023	-0.173	0.153	0.008	-0.337	0.168	-0.016	-0.035	-0.268	0.040**	0.220	0.084	-0.003
Dlnp0hybspl3yr	OLS	0.912***	-0.354	0.360	0.071	-0.137	0.045	-0.378	0.516	-0.467	0.510**	-0.337	0.195	0.100
Dlnq2spl3yr83	OLS	-0.863***	0.449	-0.124	-0.261	0.465	0.244	0.804**	-0.039	0.212	-0.404	-0.074	0.020	-0.371**
Dlnq4spl3yr83	OLS	-0.783***	0.424	-0.186	-0.137	0.427	0.217	0.648*	0.024	0.069	-0.339	-0.123	0.123	-0.289*
		Business		Other Services			Ag	Ind	Trd	Trn	Bus	Oth		
		LMC	UMC	LIC	LMC	UMC	Wald (p)	Wald (p)	r2	N				
Dlnp0spl3yr30	OLS	-0.005	-0.294	-0.923***	0.025	0.551	0.111	0.093	0.684	0.108	0.645	0.091	0.279	79
Dlnp0spl3yr42	OLS	-0.225	-0.039	-0.480***	0.039	0.313	0.221	0.071	0.396	0.381	0.818	0.192	0.257	84
Dlnp0spl3yr83	RE	0.008	-0.074	-0.041*	0.359	0.104	0.677	0.659	0.896	0.796	0.899	0.699	0.178	86
Dlnp0hybspl3yr	OLS	-0.225	-0.066	-0.923***	0.039	0.380	0.010	0.907	0.581	0.260	0.473	0.002	0.149	86
Dlnq2spl3yr83	OLS	-0.172	-0.116	0.361	0.047	-0.136	0.018	0.305	0.163	0.586	0.530	0.537	0.220	86
Dlnq4spl3yr83	OLS	-0.135	-0.114	0.398*	-0.018	0.010	0.015	0.380	0.316	0.397	0.668	0.546	0.225	86

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/5yr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05

Appendix Table 28 ESS Model: Pairwise SGEP Comparisons by Income-level, Lagged Variables

Model	Agriculture			Industry			Trade			Transport			Business			Other Services			
	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	
Dlnp0spl3yr30	OLS	0.041	0.614	0.390	0.413	0.041	0.337	0.475	0.495	0.882	0.037	0.727	0.320	0.674	0.381	0.553	0.172	0.075	0.613
Dlnp0spl3yr42	OLS	0.101	0.633	0.193	0.680	0.024	0.238	0.416	0.240	0.908	0.209	0.493	0.473	0.548	0.841	0.676	0.328	0.122	0.705
Dlnp0spl3yr83	RE	0.530	0.540	0.380	0.397	0.732	0.415	0.962	0.642	0.724	0.536	0.780	0.680	0.943	0.649	0.704	0.448	0.705	0.695
Dlnp0hybspl3yr	OLS	0.004	0.161	0.169	0.663	0.957	0.789	0.328	0.915	0.368	0.118	0.368	0.334	0.416	0.290	0.689	0.081	0.001	0.580
Dlnq2spl3yr83	OLS	0.020	0.066	0.378	0.152	0.193	0.588	0.069	0.165	0.566	0.434	0.306	0.757	0.383	0.331	0.841	0.576	0.295	0.782
Dlnq4spl3yr83	OLS	0.014	0.070	0.269	0.183	0.287	0.556	0.168	0.197	0.913	0.602	0.236	0.359	0.453	0.443	0.925	0.405	0.383	0.962

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent  $p < 0.05$

Appendix Table 29 ESS Model: SGEP by Income-level, Time Dummy Variables

Model	Agriculture			Industry			Trade			Transport			Bus
	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC	LMC	UMC	LIC
Dlnp0spl3yr30 RE	-0.037	0.126	-1.037**	-0.095	-0.407	-0.564	0.465	0.564	0.498	-0.294	-0.154	-0.371	-0.104
Dlnp0spl3yr42 RE	-0.000	-0.236	-0.750***	-0.087	-0.141	-0.117	0.157	-0.148	-0.096	-0.189	0.162	-0.385*	-0.018
Dlnp0spl3yr83 RE	0.141	-0.057	-0.096	-0.065	-0.056	-0.184	-0.065	-0.064	-0.187	0.013	0.063	-0.110	0.037
Dlnp0splfyr30 OLS	0.633	-0.855**	-0.641	-0.062	-0.248	-1.089***	-0.057	0.354	-0.163	0.131	0.200	-0.309	-0.082
Dlnp0splfyr42 RE	0.396	-0.792***	-0.565	-0.075	0.242	-0.557	-0.200	-0.202	-0.265	0.173	0.284	-0.092	-0.039
Dlnp0splfyr83 RE	0.136	-0.288**	0.157	-0.026	0.098	-0.231	-0.110	0.001	-0.627	0.060**	0.135	0.436	-0.012
Dlnp0hybspl3yr RE	0.175	-0.521	-0.096	-0.061	-0.024	-0.174	0.287	-0.119	-0.168	-0.302	0.194	-0.110	-0.150
Dlnp0hybsplfyr RE	0.633	-1.000***	0.156	-0.052	0.312	-0.230	-0.085	-0.105	-0.608	0.138	0.379	0.438	-0.084
Dlnq2spl3yr83 OLS	-0.651	0.321	0.640***	0.162	-0.019	0.391***	-0.582	-0.190	0.249	0.247	-0.051	0.018	0.244*
Dlnq2splfyr83 OLS	-0.504	0.420*	0.501*	0.129	-0.009	0.223	-0.638	-0.240	0.686	0.261	-0.027	-0.164	0.270
Dlnq4spl3yr83 OLS	-0.480	0.293	0.559***	0.138	-0.049	0.357***	-0.453	-0.096	0.185	0.139	-0.024	0.138	0.229*
Dlnq4splfyr83 OLS	-0.436	0.398*	0.347	0.115	-0.043	0.261*	-0.446	-0.144	0.583	0.098	-0.024	-0.085	0.244
Model	Business		Other Services			Ag Wald (p)	Ind Wald (p)	Trd Wald (p)	Trn Wald (p)	Bus Wald (p)	Oth Wald (p)	r2	N
	LMC	UMC	LIC	LMC	UMC								
Dlnp0spl3yr30 RE	0.073	0.252*	-0.327	-0.484	-0.959	0.193	0.495	0.984	0.919	0.314	0.548	0.222	143
Dlnp0spl3yr42 RE	-0.003	0.241***	-0.200	-0.098	-0.480	0.144	0.983	0.519	0.251	0.088	0.603	0.219	148
Dlnp0spl3yr83 RE	-0.006	0.034	-0.068	-0.076	0.102	0.470	0.820	0.820	0.668	0.929	0.674	0.217	151
Dlnp0splfyr30 OLS	-0.060	0.385*	-0.588**	-0.548	0.059	0.114	0.062	0.776	0.689	0.077	0.626	0.327	92
Dlnp0splfyr42 RE	-0.147	0.524***	-0.188	-0.394	-0.742	0.053	0.200	0.994	0.680	0.001	0.443	0.304	96
Dlnp0splfyr83 RE	-0.078	0.227*	-0.064	-0.220*	-0.148	0.096	0.595	0.657	0.612	0.129	0.407	0.264	98
Dlnp0hybspl3yr RE	-0.028	0.039	-0.058	-0.230	0.052	0.441	0.846	0.547	0.366	0.379	0.690	0.153	151
Dlnp0hybsplfyr RE	-0.183	0.230*	-0.470*	-0.512*	-0.187	0.003	0.421	0.743	0.680	0.051	0.764	0.258	98
Dlnq2spl3yr83 OLS	-0.190	-0.096	0.739***	0.703*	-0.282	0.042	0.429	0.384	0.668	0.061	0.020	0.267	151
Dlnq2splfyr83 OLS	-0.114	-0.255**	0.491	0.696**	0.043	0.600	0.814	0.252	0.825	0.079	0.413	0.294	98
Dlnq4spl3yr83 OLS	-0.210	-0.127	0.674***	0.717***	-0.188	0.071	0.306	0.488	0.672	0.032	0.011	0.318	151
Dlnq4splfyr83 OLS	-0.128	-0.310***	0.537	0.732***	0.161	0.661	0.595	0.248	0.952	0.027	0.400	0.342	98

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
 Bolded values represent p<0.05

Appendix Table 30 ESS Model: Pairwise SGEP Comparisons by Income Level, Time Dummy Variables

		Agriculture			Industry			Trade			Transport			Business			Other Services		
		LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC	LIC-LMC	LIC-UMC	LMC-UMC
Dlnp0spl3yr30	RE	0.845	0.154	0.123	0.600	0.272	0.824	0.856	0.955	0.923	0.758	0.868	0.689	0.502	0.131	0.452	0.803	0.283	0.578
Dlnp0spl3yr42	RE	0.692	0.064	0.320	0.881	0.924	0.961	0.306	0.495	0.905	0.182	0.463	0.106	0.933	0.061	0.118	0.806	0.346	0.428
Dlnp0spl3yr83	RE	0.507	0.228	0.892	0.946	0.530	0.589	0.996	0.534	0.698	0.662	0.438	0.372	0.702	0.970	0.778	0.959	0.386	0.437
Dlnp0splfyr30	OLS	0.038	0.159	0.758	0.757	0.019	0.238	0.512	0.911	0.612	0.848	0.412	0.415	0.943	0.025	0.205	0.954	0.337	0.517
Dlnp0splfyr42	RE	0.015	0.118	0.639	0.264	0.189	0.074	0.997	0.916	0.929	0.648	0.443	0.382	0.672	0.000	0.013	0.560	0.242	0.543
Dlnp0splfyr83	RE	0.036	0.961	0.315	0.407	0.549	0.379	0.625	0.409	0.362	0.557	0.415	0.526	0.666	0.052	0.108	0.183	0.824	0.844
Dlnp0hybspl3yr	RE	0.209	0.495	0.291	0.909	0.567	0.698	0.398	0.279	0.898	0.166	0.542	0.309	0.579	0.164	0.740	0.602	0.676	0.391
Dlnp0hybsplfyr	RE	0.004	0.469	0.015	0.244	0.608	0.226	0.968	0.458	0.489	0.452	0.552	0.913	0.724	0.022	0.150	0.908	0.535	0.479
Dlnq2spl3yr83	OLS	0.055	0.013	0.265	0.659	0.268	0.331	0.445	0.176	0.333	0.374	0.517	0.758	0.042	0.033	0.601	0.939	0.007	0.059
Dlnq2splfyr83	OLS	0.355	0.315	0.825	0.706	0.702	0.538	0.653	0.194	0.125	0.652	0.544	0.726	0.096	0.025	0.385	0.744	0.512	0.187
Dlnq4spl3yr83	OLS	0.092	0.025	0.287	0.558	0.216	0.216	0.441	0.237	0.457	0.600	0.997	0.410	0.020	0.020	0.592	0.917	0.005	0.040
Dlnq4splfyr83	OLS	0.366	0.397	0.871	0.620	0.485	0.351	0.691	0.225	0.119	0.831	0.765	0.842	0.083	0.009	0.194	0.749	0.551	0.180

Dependent variables are annualised log differences (Dln) over poverty spells; p0=poverty incidence; spl 3yr/fyr= spell of at least 3yr/5yr duration; 30/42/83=samples associated with poverty lines of \$3.00/\$4.20/\$8.30 per day.  
 LIC=Low Income Country; LMC=Lower Middle-Income Country; UMC=Upper Middle-Income Country  
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