

# **UNDERSTANDING MOZAMBIQUE'S GROWTH THROUGH AN EMPLOYMENT LENS**

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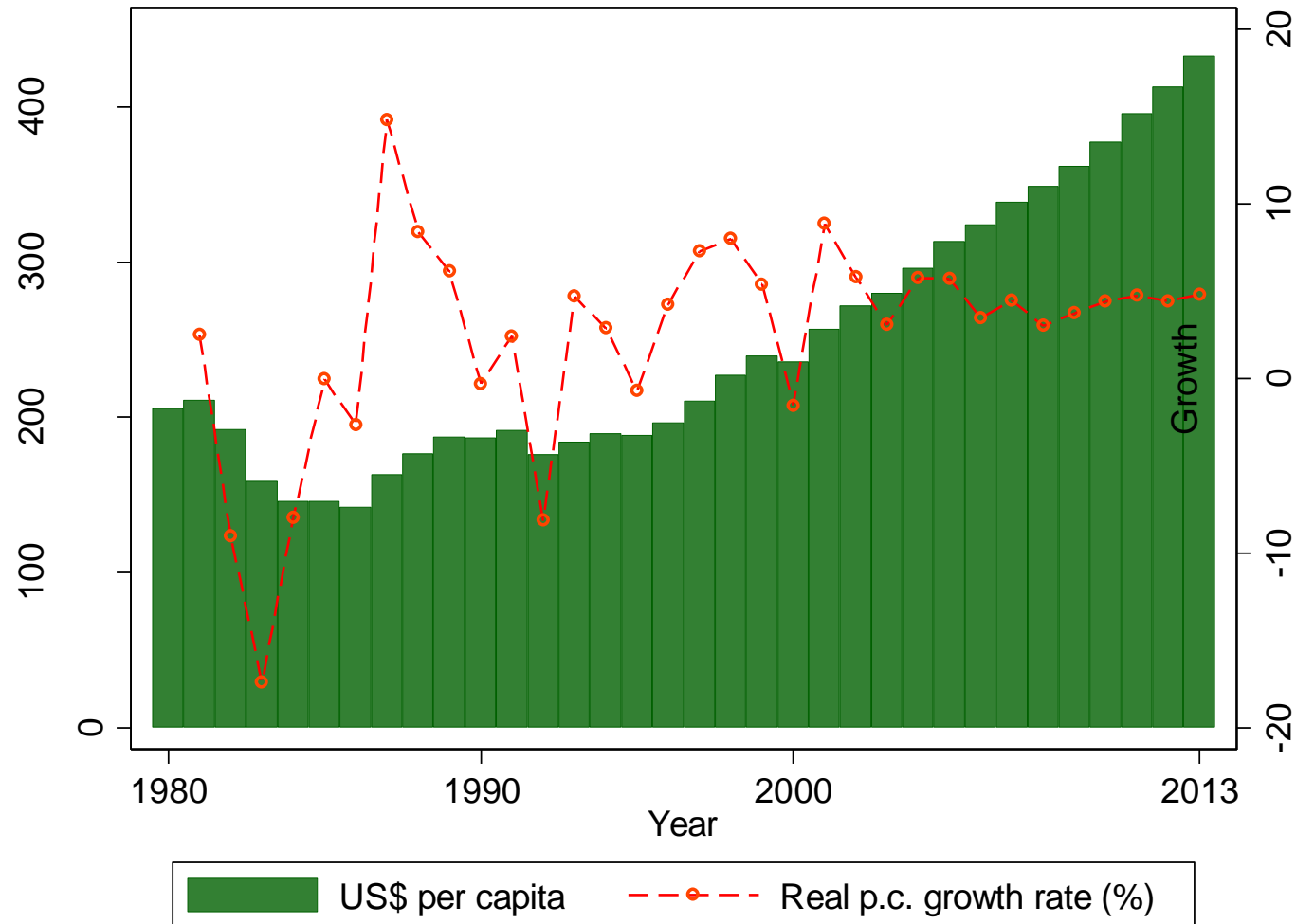
# MOTIVATION

- Mozambique one of the top regional growth performers from mid-1990s to 2016
- Successful transition from **post-conflict reconstruction** to **emerging market frontier**
- BUT pace of poverty reduction uninspiring
- On-going concern = absence of growth-enhancing structural transformation
- Mozambique **not unique** in this respect (Rodrik & MacMillan, 2012; de Vries et al., 2013)
- **New challenges emerging:** crisis & natural resources

# OUTLINE

- **Macroeconomic success**
- **Microeconomic concerns**
- **Labour market analysis**
  - Data
  - Methods
  - Trends
  - Findings
- **Policy implications**
- ***A brief update?***

# MACROECONOMIC SUCCESS



# MACROECONOMIC SUCCESS

	90-94	95-99	00-04	05-09	10-13	Change
GDP per capita, PPP (constant 2011 int. \$)	458.3	524.4	662.1	832.7	1000.0	541.7
Inflation, consumer prices (annual %)	46.2	22.9	12.9	8.4	7.5	-38.7
Foreign direct investment, net inflows (% of GDP)	1.1	3.9	5.9	4.5	30.1	29.0
Exports of goods and services (% of GDP)	11.7	13.8	25.4	31.8	29.6	17.9
Imports of goods and services (% of GDP)	42.0	30.7	42.7	41.7	40.4	-1.6
Government consumption expenditure (% of GDP)	11.9	7.5	9.7	14.8	19.5	7.7
Net ODA received (% of GNI)	57.7	30.1	29.9	21.1	16.2	-41.6

# MICROECONOMIC QUESTIONS

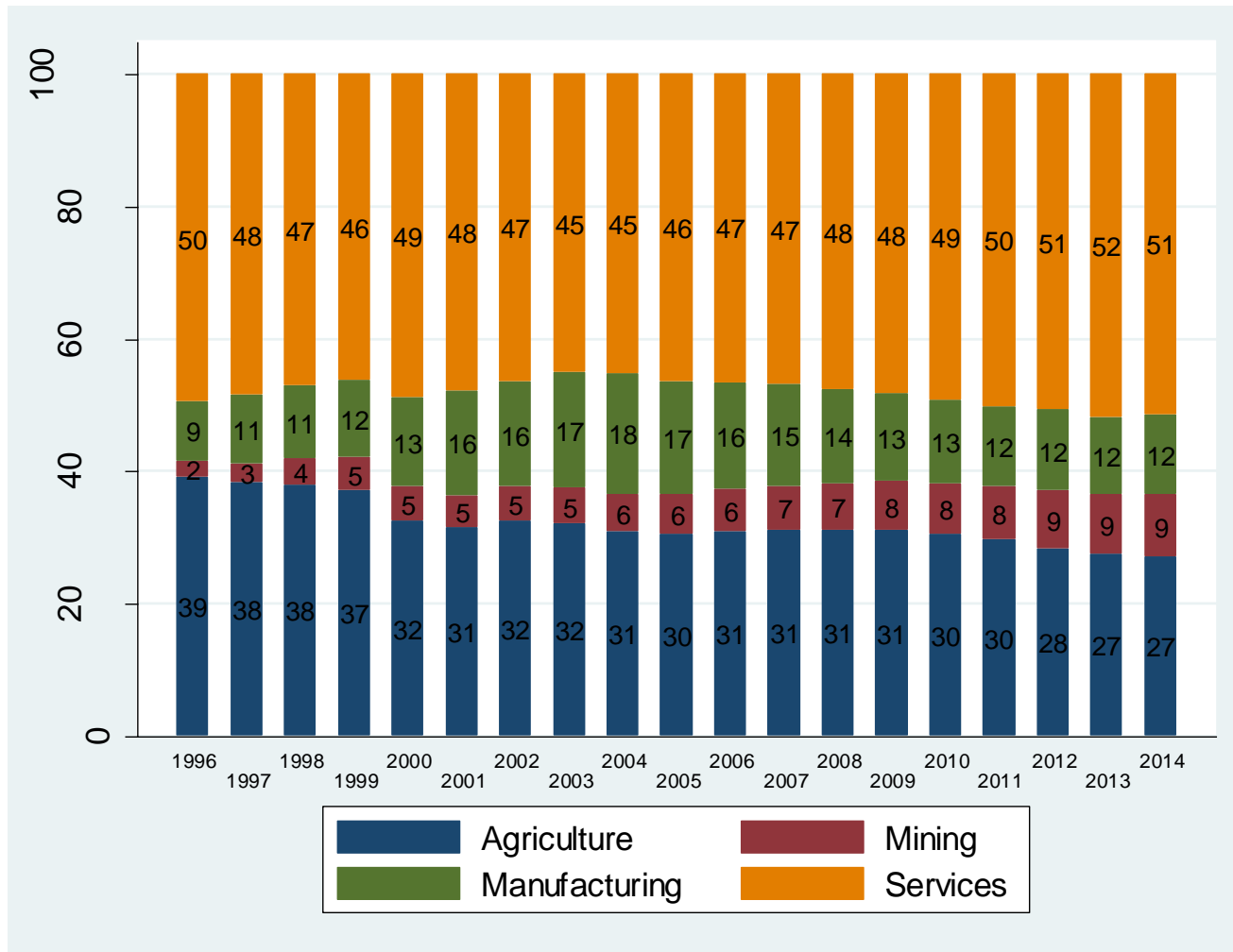
						Change p.a.	
(a)	DHS surveys	Group	1997	2003	2011	1997-03	2003-11
	No education	Male	26.2	25.4	19.3	-0.1	-0.8
		Female	47.4	44.4	32.8	-0.5	-1.5
	Infant mortality	Boys	153	127	75	-4.3	-6.5
		Girls	142	120	67	-3.7	-6.6
	Under 5 mortality	Boys	225	181	113	-7.3	-8.5
		Girls	213	176	103	-6.2	-9.1
	Total fertility rate	-	5.2	5.5	5.9	0.1	0.1
						Change p.a.	
(b)	Budget surveys	Group	1996/97	2002/03	2008/09	1997-03	2003-09
	Consumption poor	-	69.4	54.1	54.7	-2.6	0.1
	Asset poor	-	73.8	73.6	66.7	0.0	-1.2
	Asset & cons. poor	-	54.0	42.6	40.1	-1.9	-0.4
	Neither (non-poor)	-	11.8	14.8	19.0	0.5	0.7

# LABOUR MARKET ANALYSIS

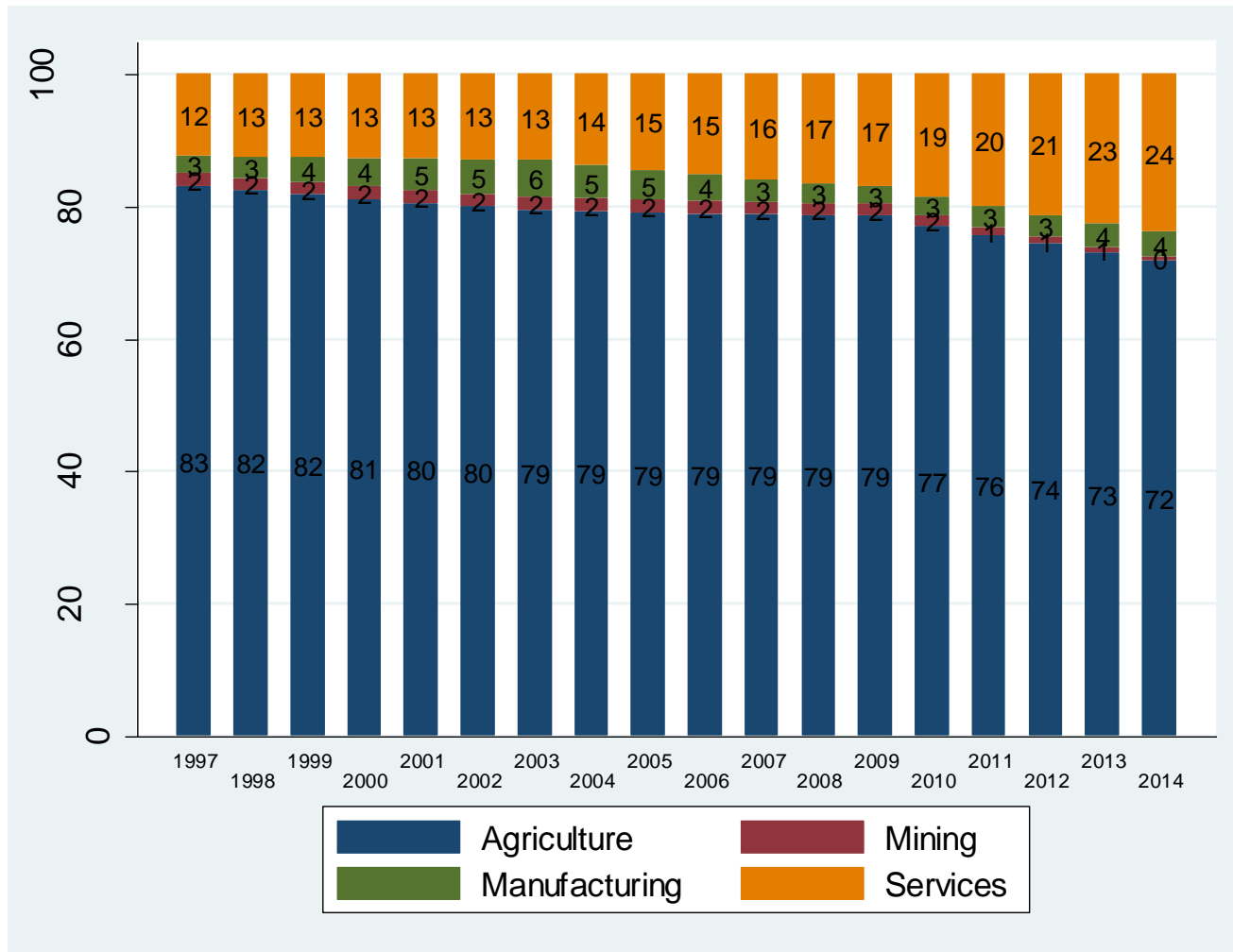
- **Labour market = primary mechanism linking household welfare and macroeconomic trends**
- **Question:**
  - To what extent has macroeconomic success been accompanied by structural changes in use of labour through the economy?
- **Data:**
  - No regular comprehensive employment data in Moz.
  - Latest full household budget survey 2014/15
    - This survey uses preliminary numbers
  - = up to date insights



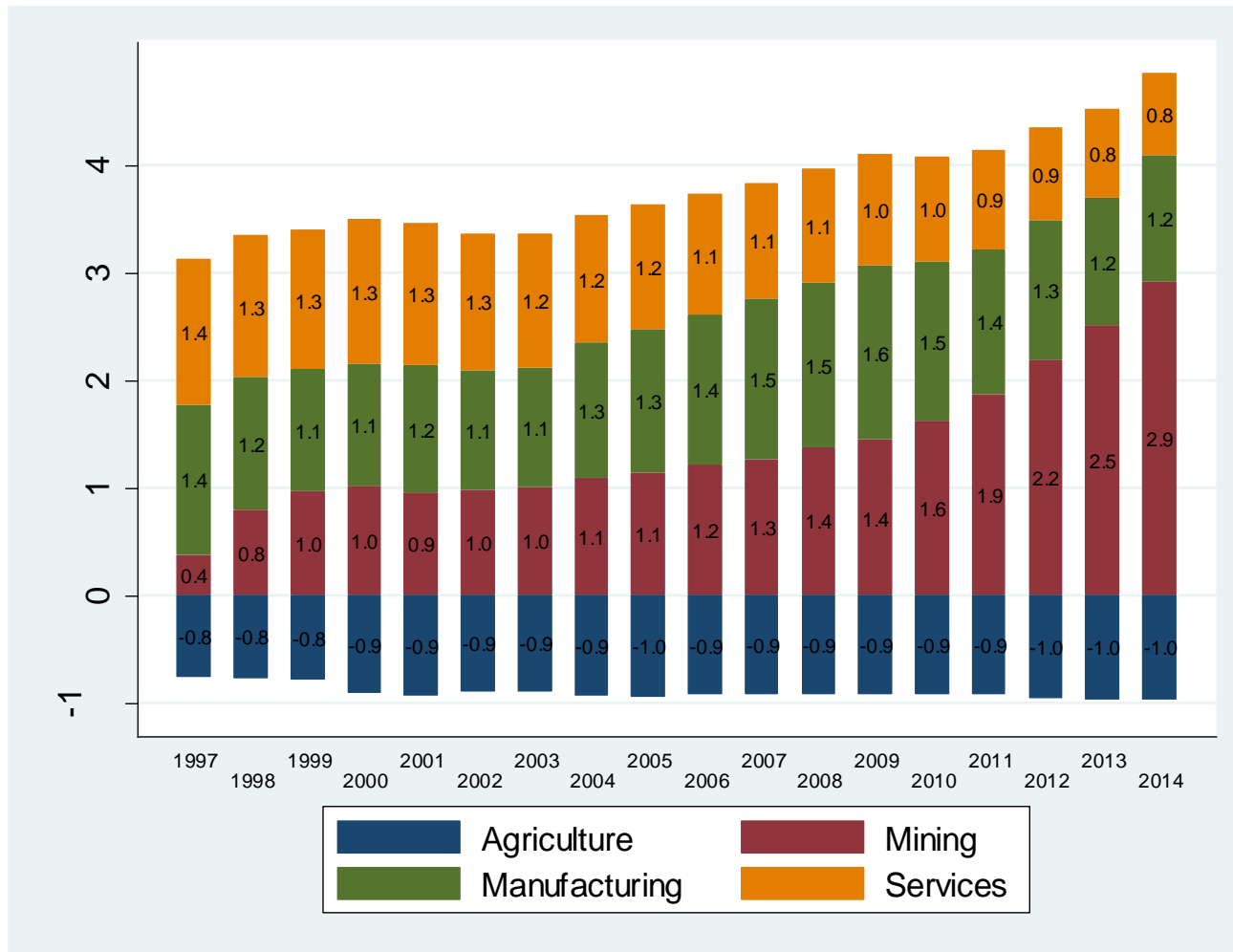
# SECTORAL GDP TRENDS



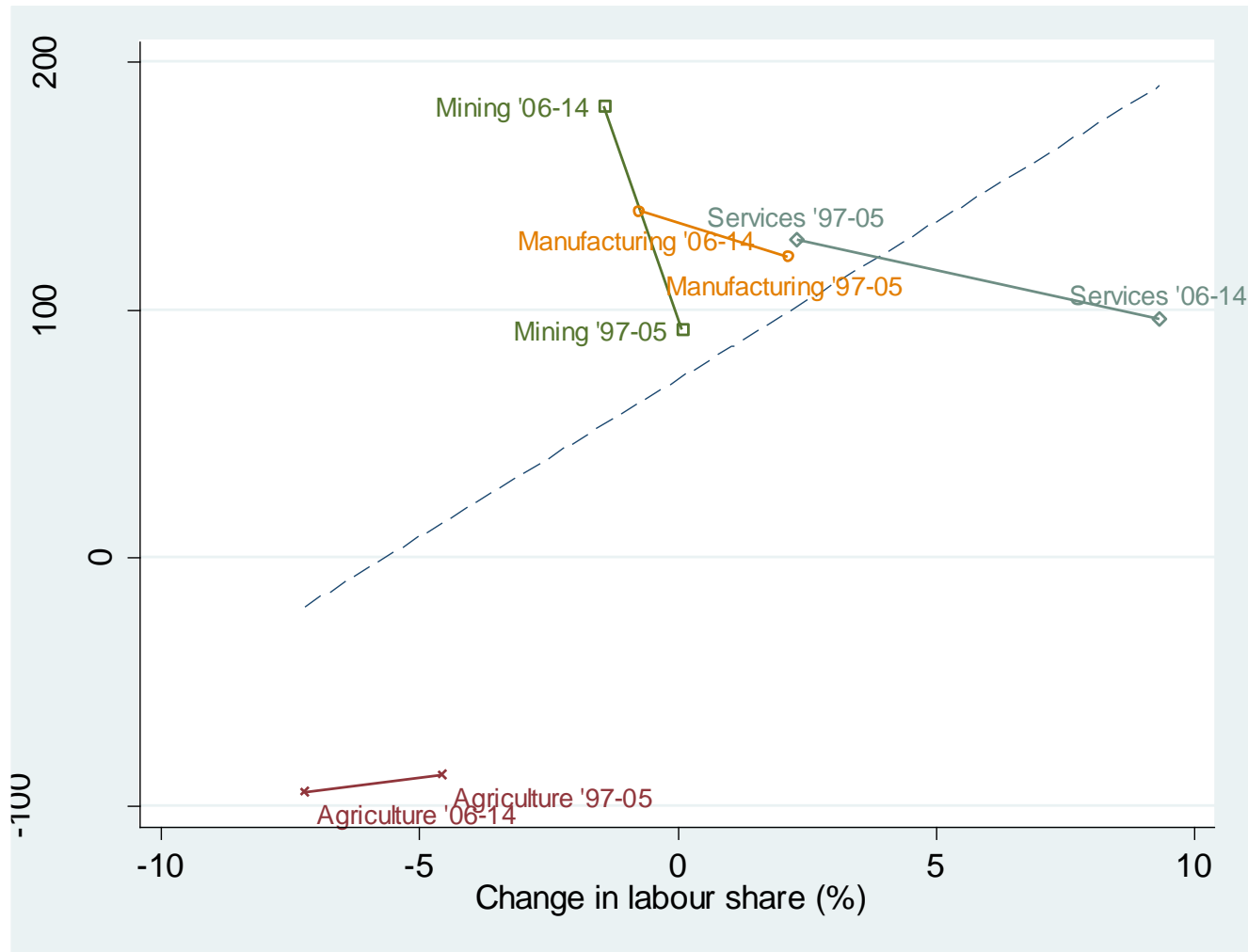
# LABOUR MARKET TRENDS



# RELATIVE LABOUR PRODUCTIVITY TRENDS



# SECTORAL DYNAMICS



# METHODS

- Standard decomposition of changes in labour productivity into three main sources:
  1. **Intra-effect**: changes in productivity within-sectors, holding output weights fixed (i.e., contribution of changes in average worker productivity).
  2. **Denison effect**: reallocation of labour across sectors, holding productivity fixed (i.e., contribution of changes in labour across sectors).
  3. **Baumol effect**: dynamic structural reallocation effect, equal to the interaction between average productivity growth and relative labour growth (i.e., positive if sectors with growing average productivity are also adding workers).

2 + 3 = components of *structural transformation*

# METHODS

$$\begin{aligned}\bar{g}_t^p &= \frac{\Delta \bar{P}_t}{\bar{P}_{t-1}} = \sum_{i \in I} (\Delta P_{it} \omega_{it-1}^L + P_{it} \Delta \omega_{it}^L) / \bar{P}_{t-1} \\ &= \sum_{i \in I} \left( \frac{\Delta P_{it}}{P_{it-1}} \frac{P_{it-1}}{\bar{P}_{t-1}} \omega_{it-1}^L + \frac{P_{it}}{P_{it-1}} \frac{P_{it-1}}{\bar{P}_{t-1}} \Delta \omega_{it}^L \right) \\ &= \sum_{i \in I} (g_{it}^P \omega_{it-1}^P \omega_{it-1}^L + \Delta \omega_{it}^L [1 + g_{it}^P] \omega_{it-1}^P) \\ &= \sum_{i \in I} \omega_{it-1}^P (g_{it}^P \omega_{it-1}^L + \Delta \omega_{it}^L [1 + g_{it}^P]) \\ &= \sum_{i \in I} (g_{it}^P \omega_{it-1}^Y + \Delta \omega_{it}^L \omega_{it-1}^P + \Delta \omega_{it}^L g_{it}^P \omega_{it-1}^P)\end{aligned}$$

# STRUCTURAL CHANGE?

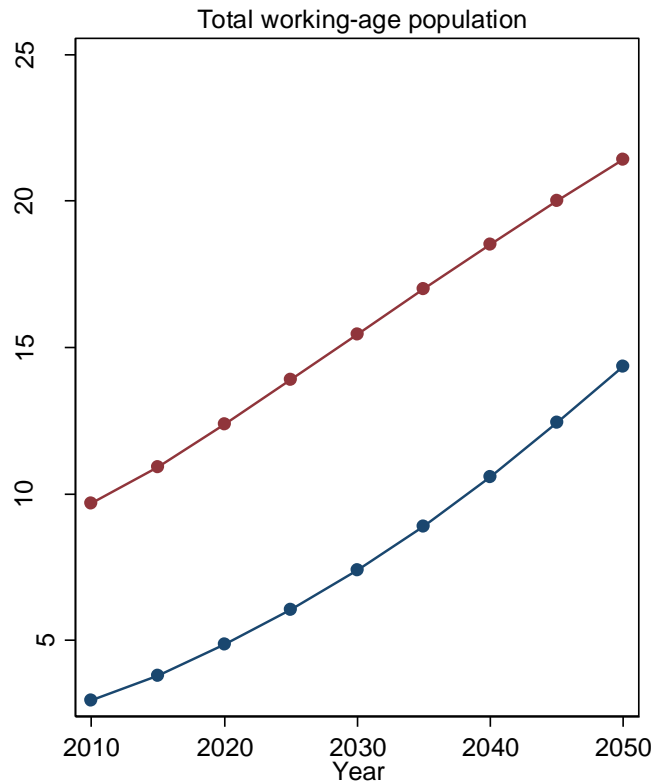
		<i>Absolute</i>				<i>Relative</i>			
		<i>Intra<sup>a</sup></i>	<i>SRE</i>	<i>DRE</i>	<i>Total</i>	<i>Intra</i>	<i>SRE</i>	<i>DRE</i>	<i>Total</i>
1997–2002	Agriculture	1.40	–0.29	–0.01	1.10	22.2	–4.5	–0.2	17.5
	Manufacturing	0.06	1.94	–0.01	2.00	1.0	30.8	–0.2	31.6
	Mining	0.67	0.06	0.01	0.73	10.5	0.9	0.2	11.6
	Services	2.15	0.32	0.01	2.48	34.0	5.1	0.2	39.3
	Total	4.28	2.04	0.00	6.32	67.7	32.2	0.0	100.0
2003–08	Agriculture	1.15	–0.08	0.00	1.06	27.6	–2.0	–0.1	25.5
	Manufacturing	2.04	–1.44	–0.21	0.39	48.9	–34.5	–5.0	9.5
	Mining	0.66	–0.07	–0.01	0.58	15.8	–1.7	–0.2	13.8
	Services	0.19	1.94	0.00	2.13	4.5	46.6	0.1	51.2
	Total	4.04	0.35	–0.22	4.17	96.8	8.4	–5.2	100.0
2009–14	Agriculture	1.02	–0.44	–0.02	0.56	24.2	–10.5	–0.4	13.3
	Manufacturing	–0.20	0.49	–0.08	0.20	–4.8	11.6	–1.9	4.8
	Mining	2.97	–1.57	–0.69	0.71	70.5	–37.3	–16.4	16.8
	Services	–0.39	3.16	–0.03	2.74	–9.2	75.0	–0.7	65.1
	Total	3.40	1.64	–0.82	4.21	80.6	38.9	–19.5	100.0

# FINDINGS

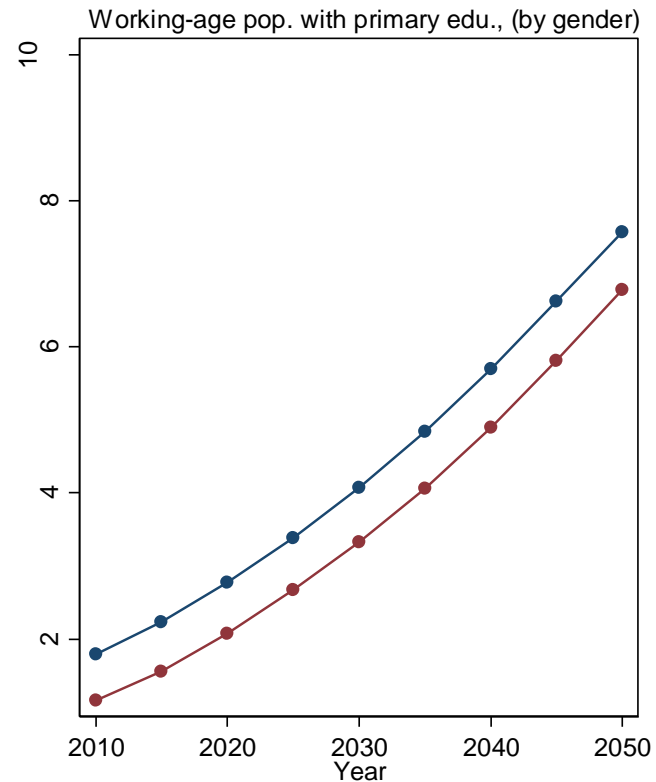
- The majority of Mozambique's labour force remains dependent on low productivity agriculture
- Inter-sectoral labour movement has been moderate, and dominated by growth of workers in services sector
- Inter-sectoral differences in labour productivity are widening, esp. with investment in mining sector
- Productivity growth driven by:
  - Within-sector growth, BUT this is slowing
  - Movement of workers from agriculture to services BUT average productivity in services is falling
  - Negative dynamic reallocation effect recentl
- **Limited contribution of structural change**



# POLICY CHALLENGE

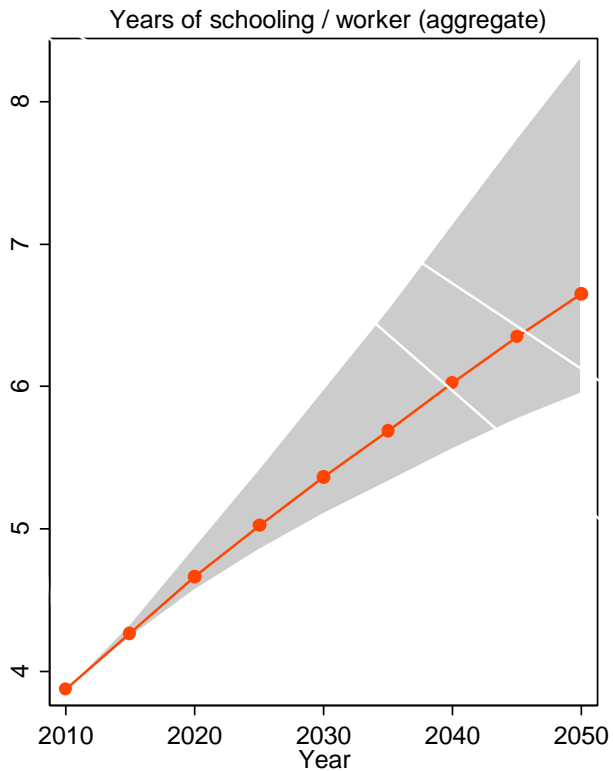


With primary Without primary

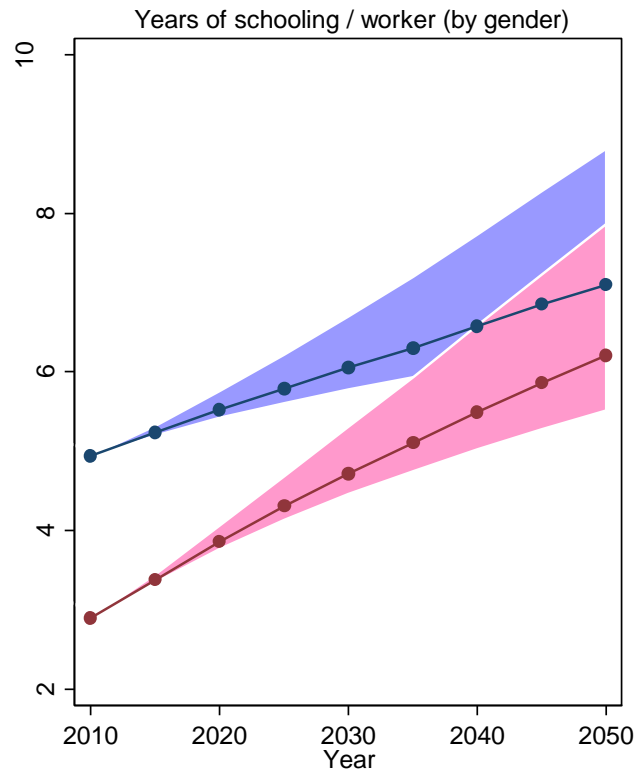


Males Females

# POLICY CHALLENGE



Forecast at median



Males Females

# POLICY IMPLICATIONS

- **Primary concern: Mozambique's current growth mode (dynamic) is capital intensive and NOT pro-poor**
- **Major demographic challenges on the horizon**
- **What can be done?**
- **Relevant distinction:**
  - Microeconomic sector- / firm-specific policies
  - Macroeconomic initiatives (affect multiple sectors)
- **Broad-based, macroeconomic approaches are preferred**
  - Weak policy implementation capacity
  - Scale of the challenge
  - Fertility rate is not falling

# UPDATE?

- **Mozambique has experienced a debt crisis since 2016**
- **Reduced growth, high inflation, depreciation, reduced aid**
- **Situation now stabilizing**
  - ... some evidence of higher unemployment
  - ... no evidence of a substantive shift in policy / econ. structure
  - ... treading water until natural gas revenues arise
- **Looming focus on natural gas:**
  - *Threat:* standard curse scenario (Angola, Nigeria)
  - *Opportunity:* UBI?

# CONCLUSION

- **Mozambique has been a success story**
- **BUT new challenges emerge in each development phase, as shown in debt crisis**
- **Current challenge is to assure genuine welfare improvements *across* society, where jobs place a key role**
- **This concern is urgent:**
  - Structural has been transformation weak and slowing
  - Current mode of growth is dependent on **capital intensive mega-projects** and **shift of some labour from low productivity agriculture to only slightly higher productivity services, which are becoming saturated**
  - Demographic challenges on horizon
- **No 'magic bullet' policy solutions**