

**Health Financing in Malawi:  
Fiscal Space Analysis and Prospects for  
Introducing Earmarked Taxes for Health**

**World Bank Group**

# Acknowledgements

- Vice President's Office; Ministry of Health; Ministry of Finance; Ministry of Natural Resources, Energy and Mining; Malawi Police
- USAID (Abt Associates)/SSDI – Initial report, raw data, and continuous engagement
- Malawi Revenue Authority, Reserve Bank of Malawi, National Statistical Office, Tobacco Control Commission, Malawi Energy Regulatory Authority, Extractive Industries Transparency Initiative (EITI) Secretariat, University of Malawi, Road Accident Fund of South Africa
- Guidance from the World Bank's Macro Economics and Fiscal Management team; Health, Nutrition and Population team; and Health Financing Global Solutions Group
- Triangulating evidence from regional and international studies
- At this meeting – More inputs from all stakeholders

# Demographic Characteristics

- Malawi's population has grown rapidly from 3.6 million in 1960 to 16.3 million in 2015
- 46.4% of the population is below the age of 15 years
- Population growth rate mainly driven by a high TFR (5.5 children per woman in 2015)
- Pre-demographic dividend country
  - Transition from high to low birth and death rates is moving at a very slow pace for Malawi to reap the benefits of a Demographic Dividend
  - Malawi will continue experiencing significant population growth as more and more youths enter the reproductive age, and this may weaken Malawi's economic growth prospects
  - High total and child dependency burden estimated at 98 and 92 dependents, respectively, for every 100 working-age persons in 2015
  - Overall youth unemployment estimated at 23% in 2012/13 is very high

# Health Indicators - Malawi vs Low Income Countries

Health outcome/output	1990	2015	Low Income Countries (2015)	MDG Target for Malawi
Infant Mortality Rate (deaths per 1,000 live births)	143	43	53	48
Under-five Mortality Rate (deaths per 1,000 live births)	242	64	76	81
Maternal Mortality Ratio (deaths per 100,000 live births)	957	634	495	239
Total Fertility Rate (No. of children per women)	7	5.5	4.8 (2014)	
Prevalence of Stunting in children under-five (%)	48.7 (1992)	37	37.6 (2014)	
Prevalence of HIV (population 15-49 years) (%)	8.8	10 (2014)	2.9 (2014)	
Children aged 12-23 months vaccinated against measles (%)	86 (1992)	91	76.7 (2014)	
Pregnant women delivered by a skilled provider (%)	-	90	49.4 (2014)	

# Macroeconomic Indicators

	2011	2012	2013	2014	2015
<b>Macroeconomic Indicators</b>					
Nominal GDP USD (millions)	8,004.00	6,028.49	5,518.88	6,047.81	6,565.38
Real GDP USD, 2010 base (millions)	7,297.48	7,435.10	7,821.72	8,267.56	8,511.45
GDP per capita, constant 2010 USD	479.3	473.6	483.1	495.2	494.4
<b>Real GDP growth rate (%)</b>	<b>4.9</b>	<b>1.9</b>	<b>5.2</b>	<b>5.7</b>	<b>2.8</b>
<b>Inflation (annual %)</b>	<b>7.6</b>	<b>21.3</b>	<b>27.3</b>	<b>24.4</b>	<b>21.2</b>
Unemployment Rate			6.4		
<b>Fiscal Indicators</b>					
<b>Gross Debt (% of GDP)</b>	<b>27.6</b>	<b>40.2</b>	<b>50.6</b>	<b>48.0</b>	<b>53.8</b>
<b>Deficit (including grants) % of GDP</b>	<b>-2.1</b>	<b>-4.8</b>	<b>-0.5</b>	<b>-5.7</b>	<b>-5.7</b>
Total Government Revenue (% of GDP)	23.6	18.7	27.5	22.8	21.4
Total Government Spending (% of GDP)	25.7	23.5	28.5	28.9	27.9
Tax Revenue (% of GDP)	15.2	13.7	15.7	17.3	16.3

# **HEALTH FINANCING INDICATORS**

# Key Health Financing Indicators

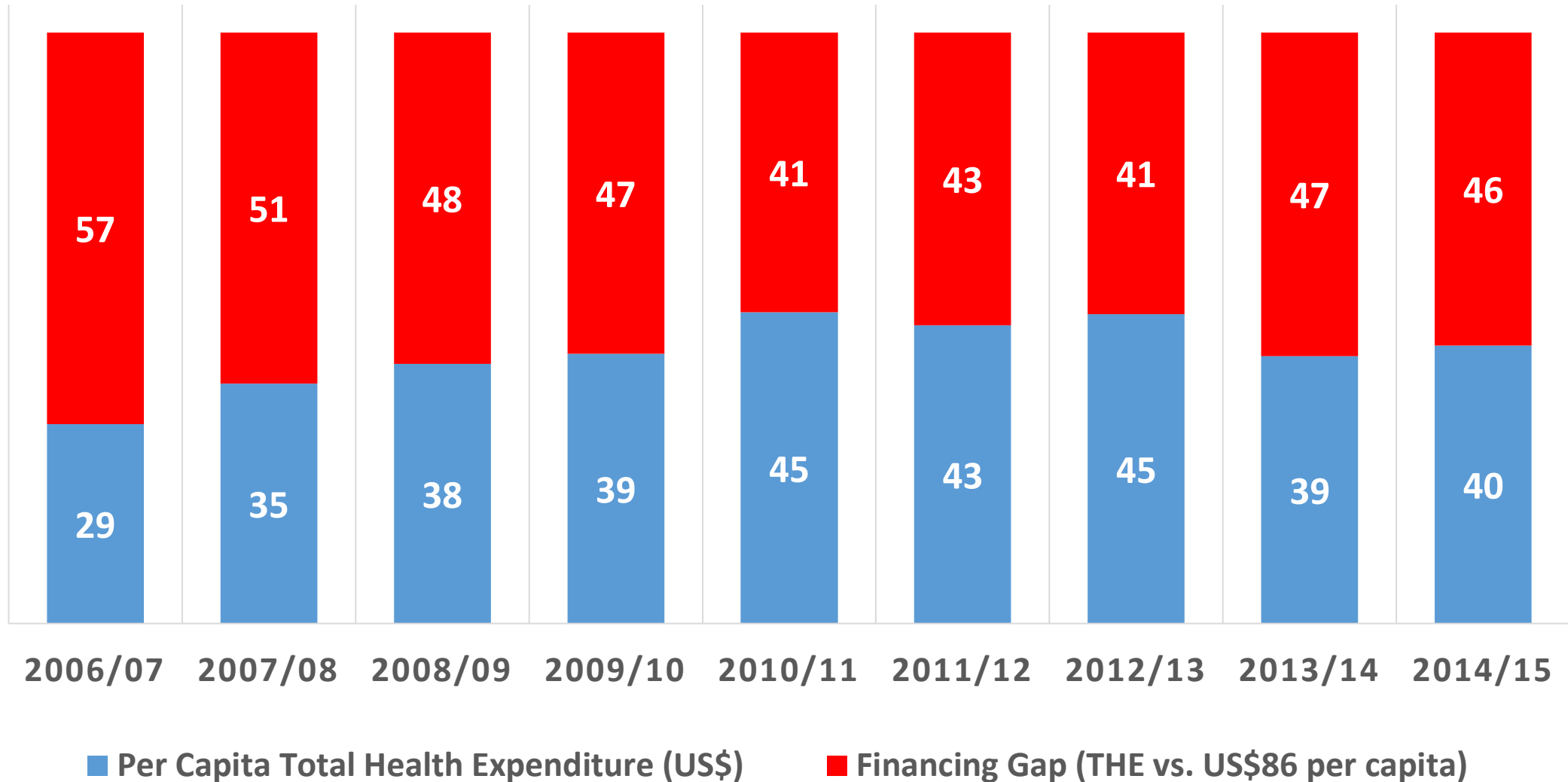
	2011	2012	2013	2014	2015
<b>Per Capita Total Health Expenditure (average US\$ exchange rates)</b>	45	43	45	39	40
<b>Per Capita Donor Health Expenditure (average US\$ exchange rates)</b>	20	22	25	24	29
<b>Per Capita Government Health Expenditure (average US\$ exchange rates)</b>	3.9	7.8	6.8	9.0	9.8
<b>Total Health Expenditure (THE) % of GDP</b>	8	11	13	10	10
<b>Government Health Expenditure % of GDP</b>	2	2	3	3	3
<b>Government Health Expenditure % of THE</b>	22	17	23	25	29
<b>Government Health Expenditure % of Total Government Expenditure</b>	7	8	10	9	10
<b>Household Expenditure % of THE</b>	10	11	7	8	11

# Composition of Total Health Expenditure - Malawi: 2009/10-2014/15

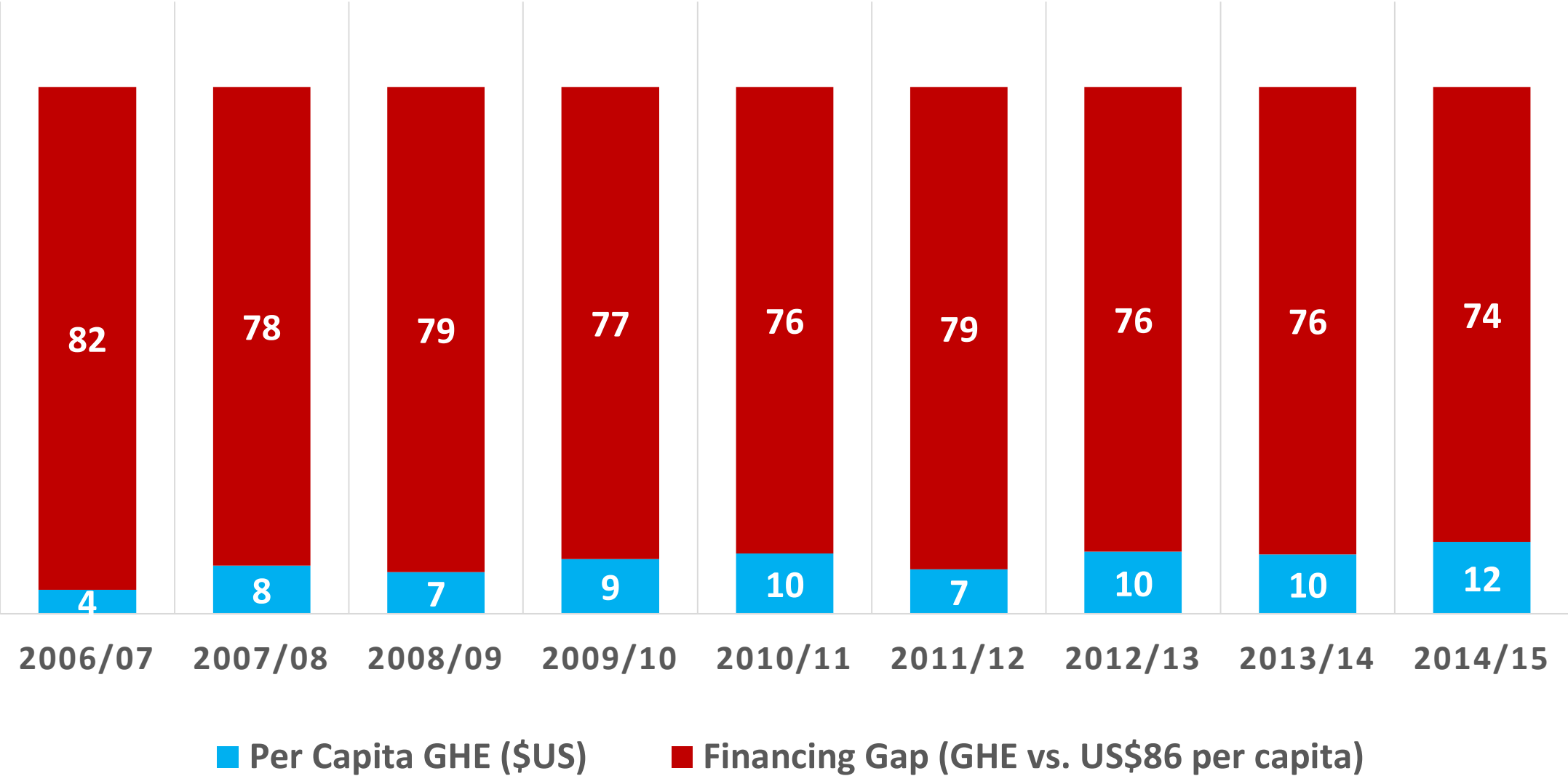




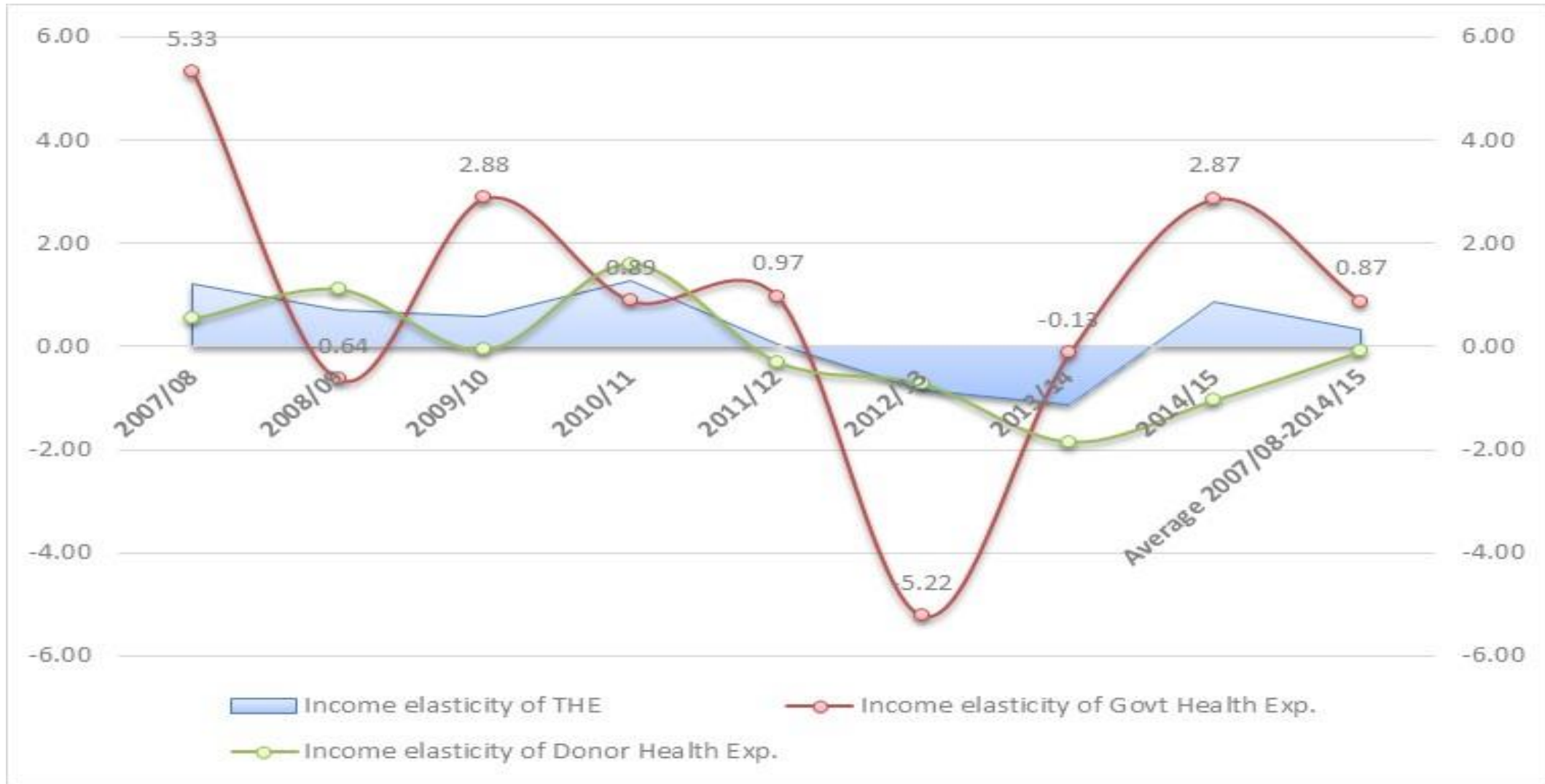
# Financing Gap (THE vs. US\$86 per capita)



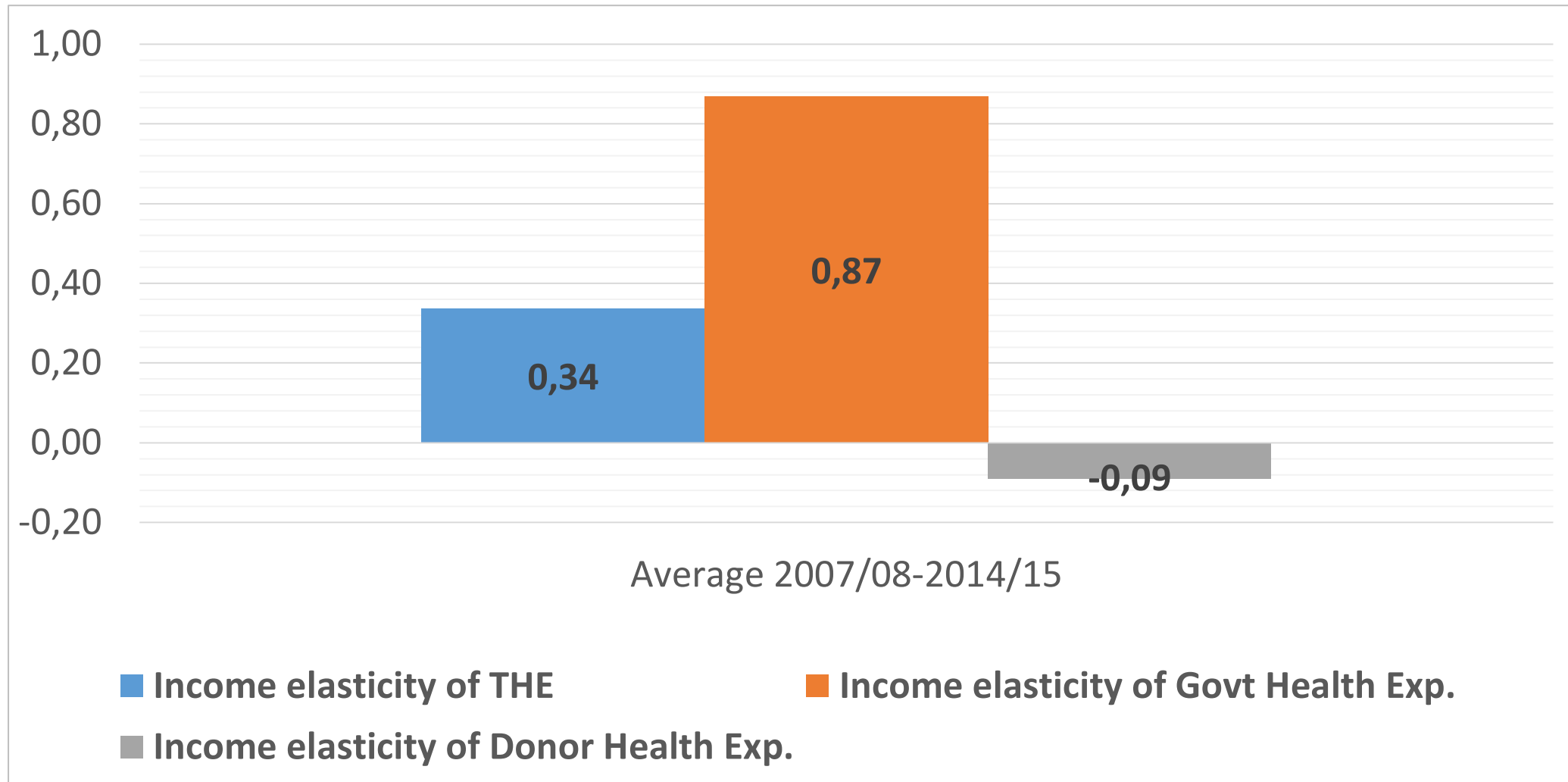
# Financing Gap (GHE vs. US\$86 per capita)



# Income Elasticity of Health Spending: 2007-2014



# Period Average:- Income Elasticity of Health Spending: 2007-2014



# **STUDY DESIGN & METHODOLOGY**

# Rationale of the Study

- **The Government of Malawi (GoM) intends to reform the financing and organization of the health sector amidst significant constraints in the fiscal and macroeconomic environment**
  - A large and growing gap between available finances, costs, and needs;
  - High degree of donor dependency in the health sector;
  - But .... a weak fiscal position for the Government, particularly after the “Cash Gate” scandal; and
  - Large fiscal deficits at the macro level which have led to large borrowing and inflationary pressures that are undermining growth, and in turn feeding back into poor fiscal performance

# Objectives of the study

- 1. To establish the short to long term revenue generation potential, and sustainability of introducing earmarked taxes for health.**
  - *Main reference document is the consultancy report, “A comprehensive review of literature on Health Funds, and the Proposed Malawi Health Fund” where eleven (11) areas were identified for earmarking*
  - *Review the revenue generation potential of introducing a tax on motor vehicle insurance*
- 2. Conduct a broad analysis of the revenue collection strategy, use, and administrative arrangements**

## Specific Objectives

- *Assessment of fiscal space for health*
- *Assessment of potential adverse effects for the 12 proposed earmarked taxes in relation to the broader macroeconomic environment including regressivity, trade flows and business income, consumption patterns*

# Review Methodology

- **A mixed methods approach using both qualitative and quantitative research techniques**
- Analysis of existing reports and raw data that were used in the initial analysis in line with Malawi's country context and best practices
- Additional secondary analyses of demographic, macroeconomic, and revenue data
- Merging production and household data with tax data
- Models of Tax projections
  - Financial Accounting Model
- Revenue simulations and projections
  - Scenario analysis using different tax levels
  - Determine optimal taxation



# RESULTS

# FISCAL SPACE ANALYSIS

## The prospects of creating 'fiscal space' for the health sector

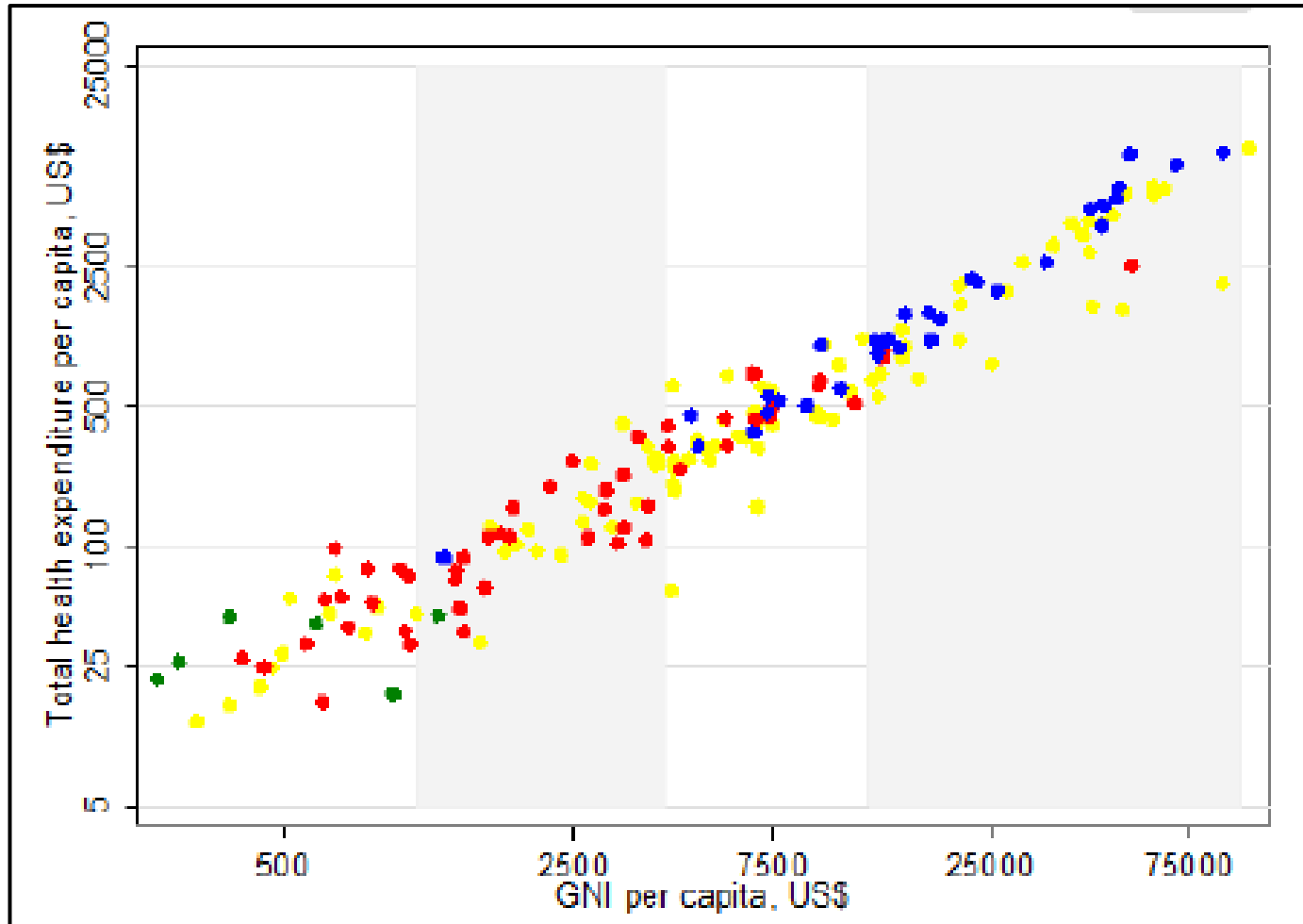
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1. **Conducive macroeconomic conditions** including increased economic growth and overall government revenue with possibilities of increased government expenditure on health; **LIMITED**
2. **Re-prioritization** of health within the government budget; **LIMITED**
3. **Additional resources for the health sector** through earmarked taxes, health insurance, etc; **MODERATE**
4. **Increased health sector-specific foreign aid;** **LIMITED**
5. **Improved efficiency** in the government allocation and expenditure. **GOOD**

# Total Health Expenditure per capita by GNI per capita



Notes: Countries are color-coded based on the largest source of financing for health:

- Government revenues (yellow)
- Social health insurance (blue)
- OOPs (red).

Source: WHO, Global Health Expenditure Database 2015.

# Tax revenues as a share of GDP

Fiscal Indicators					
	2011	2012	2013	2014	2015
Gross Debt (% of GDP)	27.6	40.2	50.6	48.0	53.8
Deficit (including grants) % of GDP	-2.1	-4.8	-0.5	-5.7	-5.7
Total Government Revenue (% of GDP)	23.6	18.7	27.5	22.8	21.4
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- Tax revenues as a share of GDP are below the benchmark of 20% in most LICs
- Increasing tax ratios to 20% of GDP – results in average gains of \$US28 per capita in LICs
- *At 16.3% of GDP in 2015, Malawi is close to reaching its tax capacity. This suggests that major improvements in tax collection efforts are unlikely*

# QUALITATIVE ANALYSIS - FEASIBILITY OF INTRODUCING EARMARKED TAXES

- Need to generate additional domestic revenues for the health sector appreciated but experts observed that most of the areas were already heavily taxed
- Increased taxes or levies in the already existing areas could have an adverse effects on production, trade, and consumption
- Consensus was to identify and re-allocate revenue from existing taxes or levies without increasing tax rates
- Focus should be on levies rather than taxes because revision of taxes would require amendment of certain regulations and legislature through parliament
- Emphasis should also be on improving the tax administration capacity at Malawi Revenue Authority which could lead to improved revenue collection
- All proposals on earmarked taxes in the sector should be aligned to the overall tax reform process
- **Potential areas: Fuel & Motor vehicle insurance**
- **Review the proposed establishment of a Third Party Motor Compensation Fund**
- **Prohibitive areas: Mobile phone talktime; corporate businesses; VAT; moneys received from loans applied through parliament; and donations received from developing partners, foundations etc**

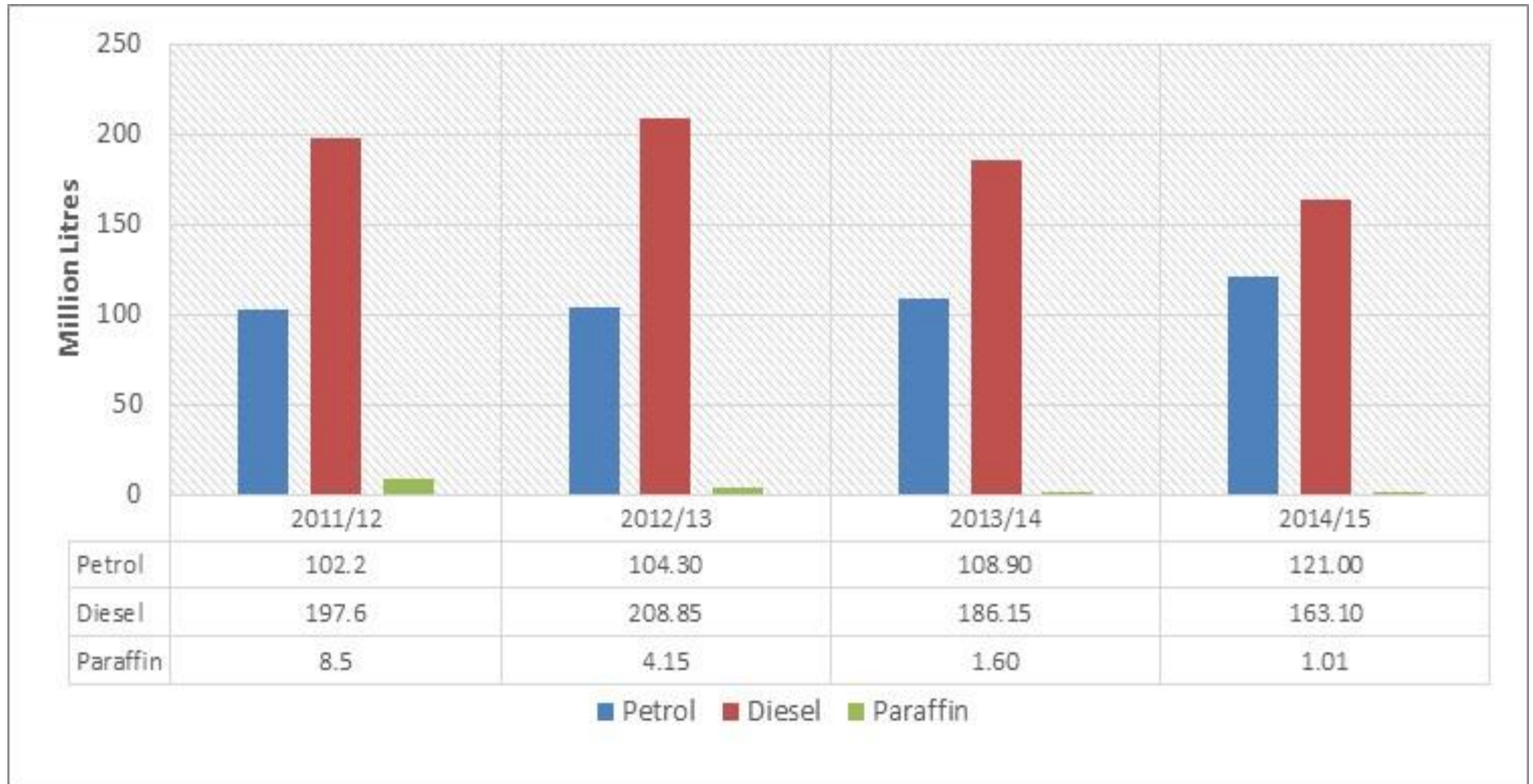
# QUANTITATIVE ANALYSIS - FEASIBILITY OF INTRODUCING EARMARKED TAXES

- The effective tax rate forecasting approach was used to forecast the revenues
- For fuel levies (rural electrification and storage), the tax base (TB) is fuel demand
- For alcohol and tobacco, the TB is sale revenues; for extractives the tax base is the production value; and for motor vehicle insurance the tax base is gross premiums
- To forecast the TB, projections for real GDP ( $Y_t$ ) and nominal GDP ( $nY_t$ ) were obtained from World Development Indicators
- For tax rates, the study relied on a report by MoH and Abt Associates (2015) which proposes three (3) different tax rates for each of the identified areas
- Based on expert opinion and documents reviews only five (5) of the twelve (12) initially identified areas were subjected to a quantitative analysis. The five (5) areas are: fuel, motor vehicle insurance, extractives industry, alcohol, and tobacco

# Proposed Tax Rates

Earmarked Tax	Low	Medium	High	Tax Base
1. Existing fuel levies	MK8.10/litre (10% or K3.10/litre from MAREP <u>plus</u> MK5.00/litre from Storage Levy)	MK11.20/litre (20% or K6.20/litre from MAREP <u>plus</u> MK5.00/litre from Storage Levy)	MK14.30/litre (30% or K9.30/litre from MAREP <u>plus</u> MK5.00/litre from Storage Levy)	Litres of fuel
2. Motor Vehicle Insurance	1%	2%	3%	Gross Premiums
3. Extractives	1%	2%	3%	Production Value
4. Alcohol	10%	20%	30%	Sales Revenue
5. Tobacco	10%	20%	30%	Sales Revenue

# Domestic Demand for Fuel: 2011/12 - 2014/15





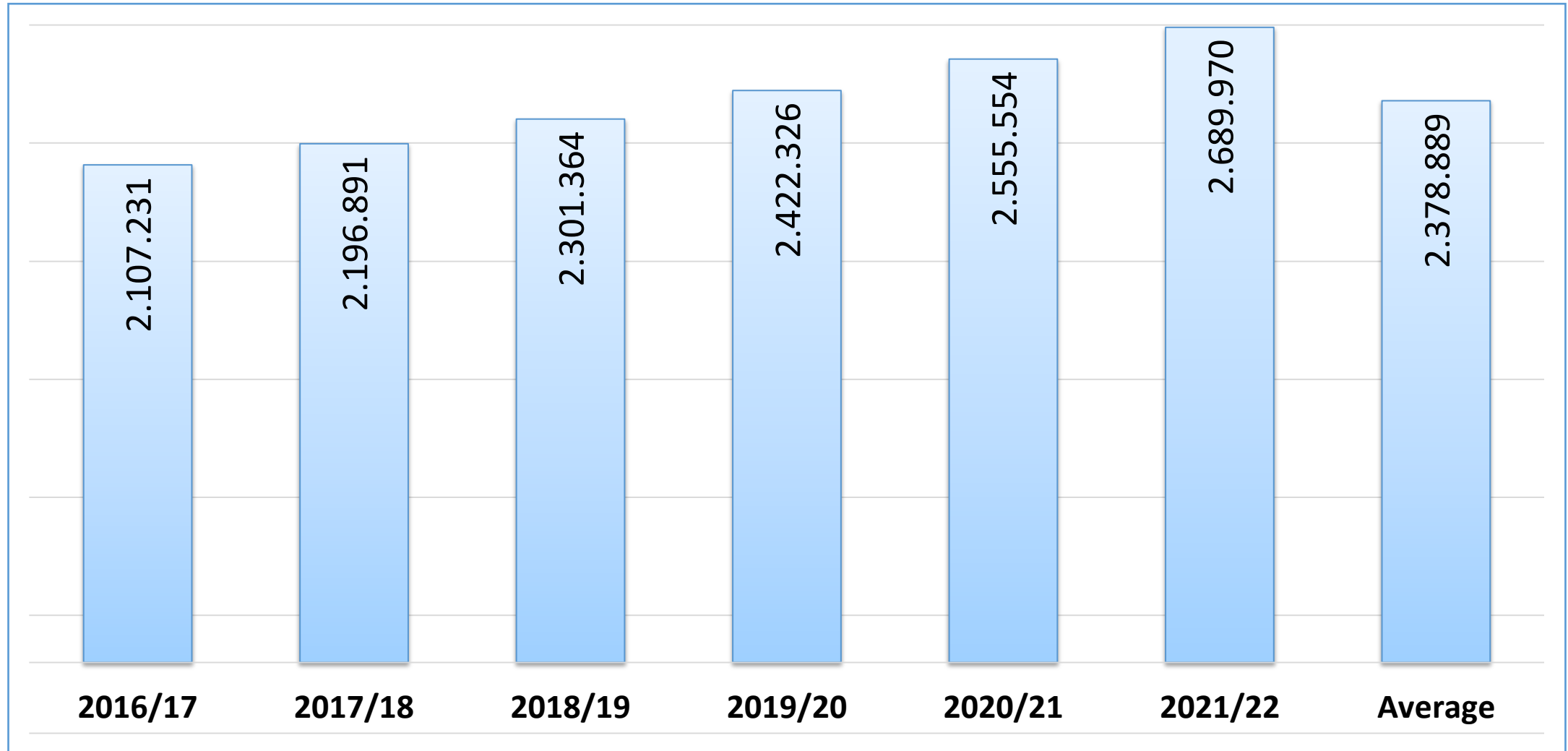
# ADVERSE EFFECTS & MITIGATING MEASURES

- There are about 11 levies, duties, and charges on fuel which contribute 34%, 27%, and 21% to the pump price for petrol, diesel and paraffin, respectively
- Introduction of a new levy on fuel will result in an increase in fuel prices in the year of its introduction, holding other factors constant
- Magnitude of the price increase and its adverse effects depends on the size of the fuel levy but only in the year of its introduction
- Increase in fuel prices increases costs in all sectors of the economy, particularly manufacturing and transport
- For Malawi, the weight of fuel and/or transport in the Consumer Price Index (CPI) at 6.6% is third
- In the long run, persistent increases in fuel pump prices would lead to reduced economic growth, inflation, worsening balance of payment (BoP) position, and increased inequality
- Evidence from household surveys shows that increases in oil prices tend to have a stronger effect on poorer households, as a higher proportion of their expenditure goes on transport

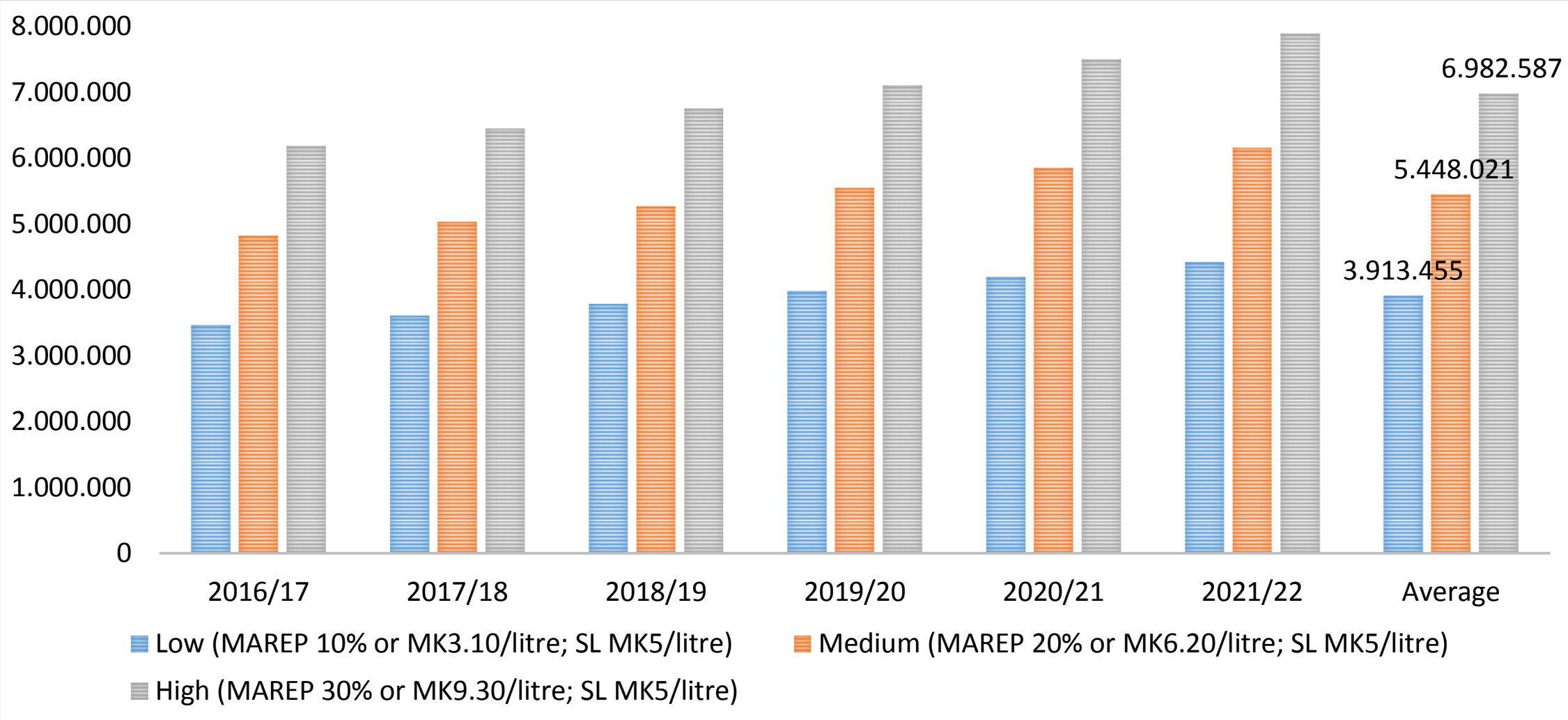
# REVENUE POTENTIAL – FUEL LEVIES

- Rather than introducing a new levy on fuel, consensus is to use existing fuel levies as follows:
  - Convert the existing storage levy into a medical levy
  - Allocate a share of future revenues (10%, 20%, 30%) from the MAREP levy to health
- Justification:
  - Low absorption of MAREP revenue
  - Fuel storage facilities have already been constructed
- Looking forward, real GDP growth for Malawi is projected at 3.0% in 2016, 4.1% in 2017, and 5.4% in 2018
- 1MK=US721.07 (RBM, 12<sup>th</sup> October 2016)
- Assuming that the demand for petroleum products grows in the same proportion with economic growth, revenue has been forecasted

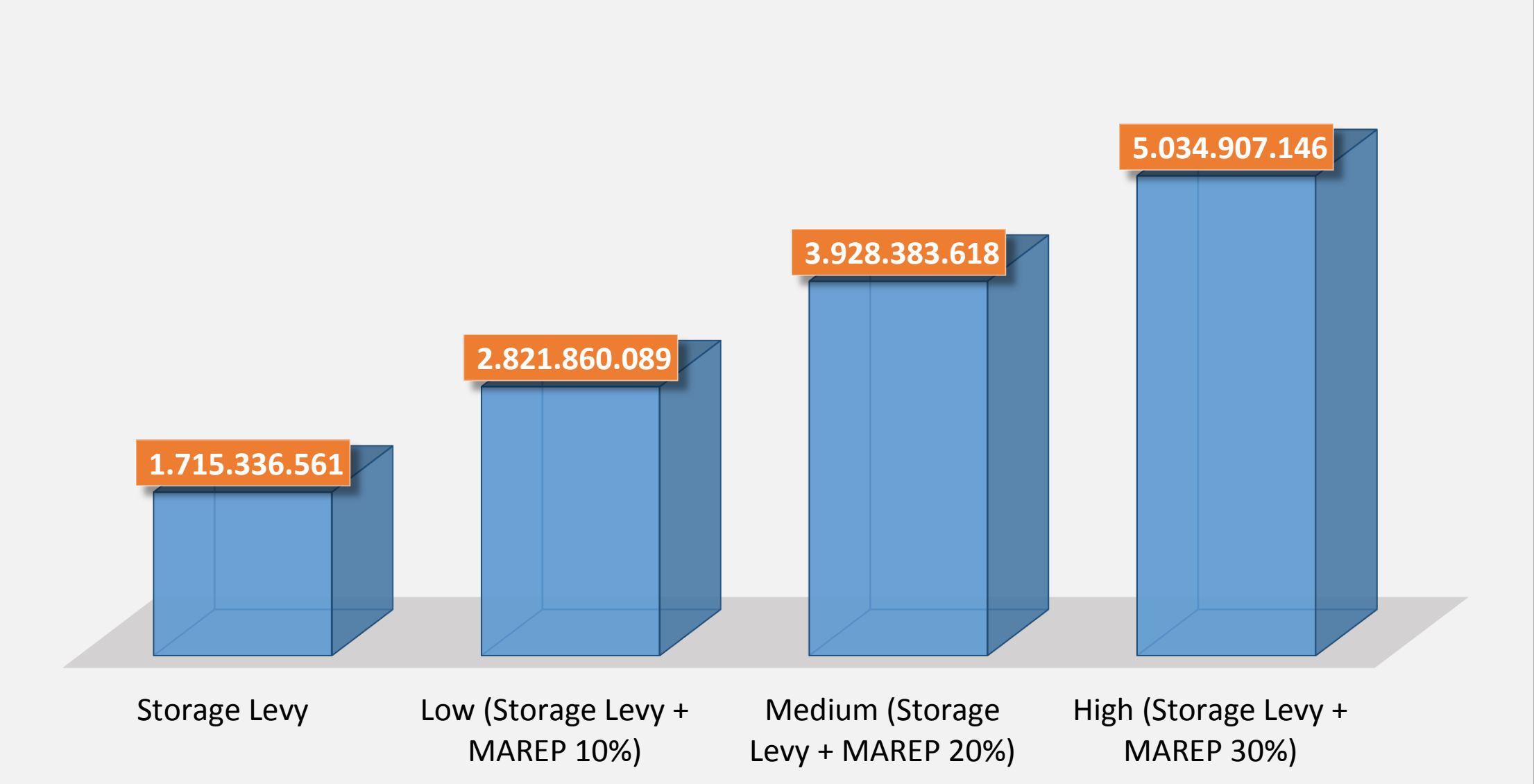
# Potential Revenue from Storage Levy (US\$)



# Potential Revenue from MAREP & Storage Levy (US\$)



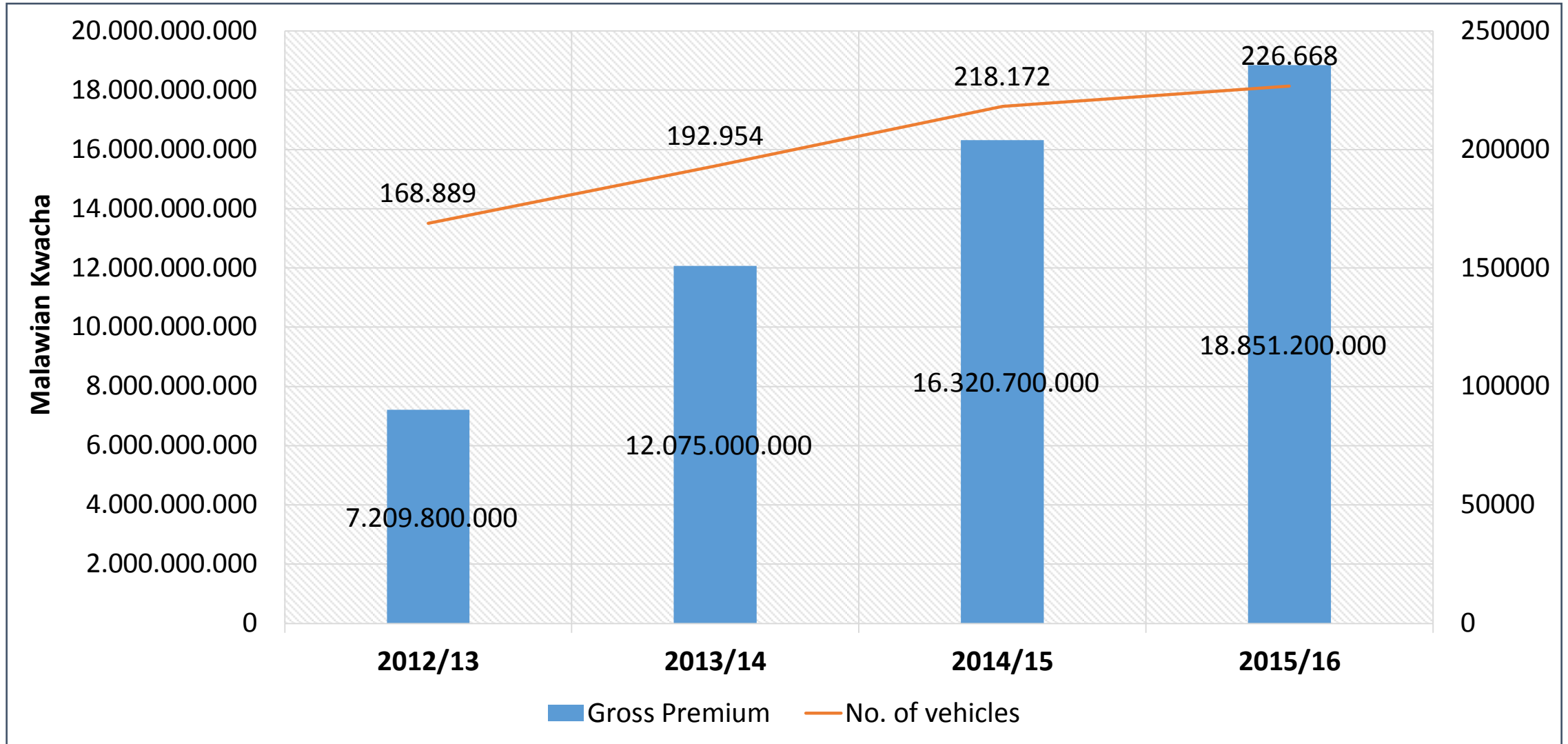
# Potential Revenue from MAREP and Storage Levy (MK): Annual Average 2016/17-2021/22



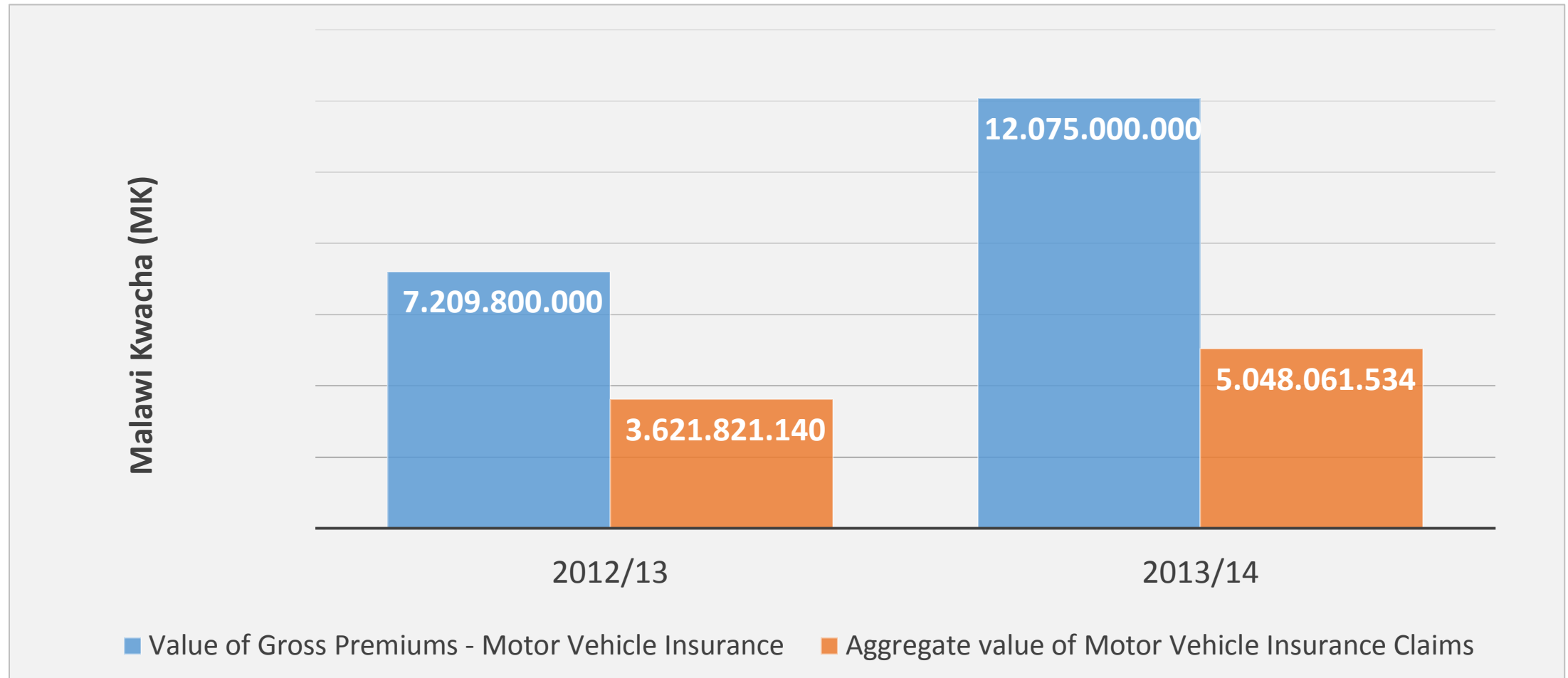
# Regulation, Pricing, & Demand of Motor Vehicle Insurance

- **Insurance sector is governed by the Financial Services Act, Insurance Act, and regulated by Registrar of Financial Institutions**
- Currently the only tax under the insurance sector is the corporate income tax, and a license fee of K150,000 per insurance company
- **Pricing of insurance products is determined by the individual insurance companies particularly for comprehensive motor insurance.** For third party insurance, a maximum of MK250,000 is paid to aggrieved third parties in respect of damage to motor vehicle, death/bodily injury
- **All vehicles in Malawi are required to have a minimum of third party insurance cover by law.** Therefore demand for motor vehicle insurance is price inelastic in Malawi, and gross premiums depends on the availability of motor vehicles
- Between 2012/13 and 2015/16, the gross premiums from motor vehicle insurance increased by 161% from MK7.21 billion in 2012/13 to about MK18.8 billion in 2015/16
- But increase has been at a decreasing rate due to preference for cheaper third party insurance cover than comprehensive cover. Declines could also be attributed to some road users illegally using uninsured vehicles

# No. of Vehicles Vs Gross Premiums from motor vehicle insurance



# Gross Premiums Vs Aggregate Insurance Claims



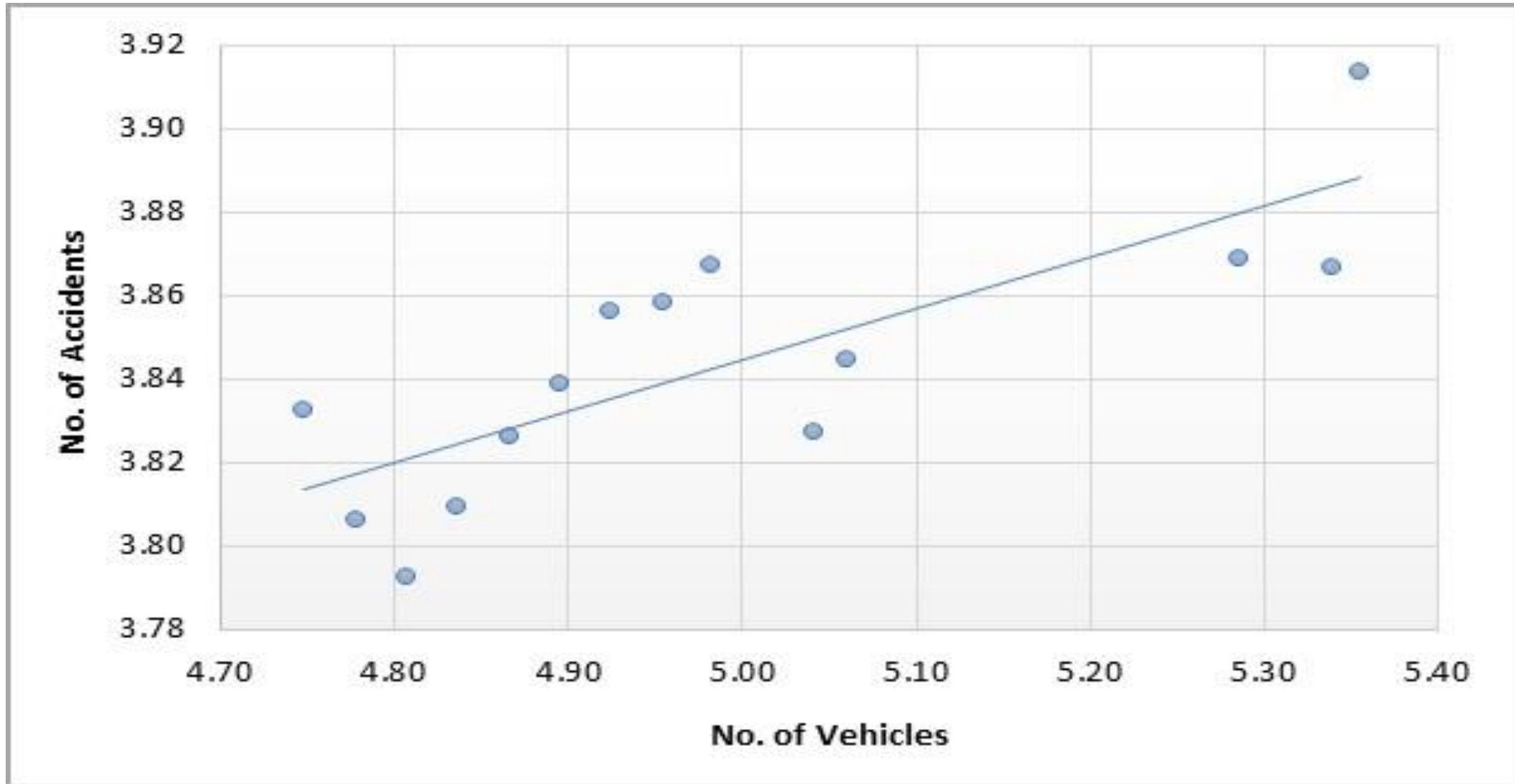
Value of the motor vehicle insurance premiums in Malawi is above the value of the aggregate motor vehicle insurance claims



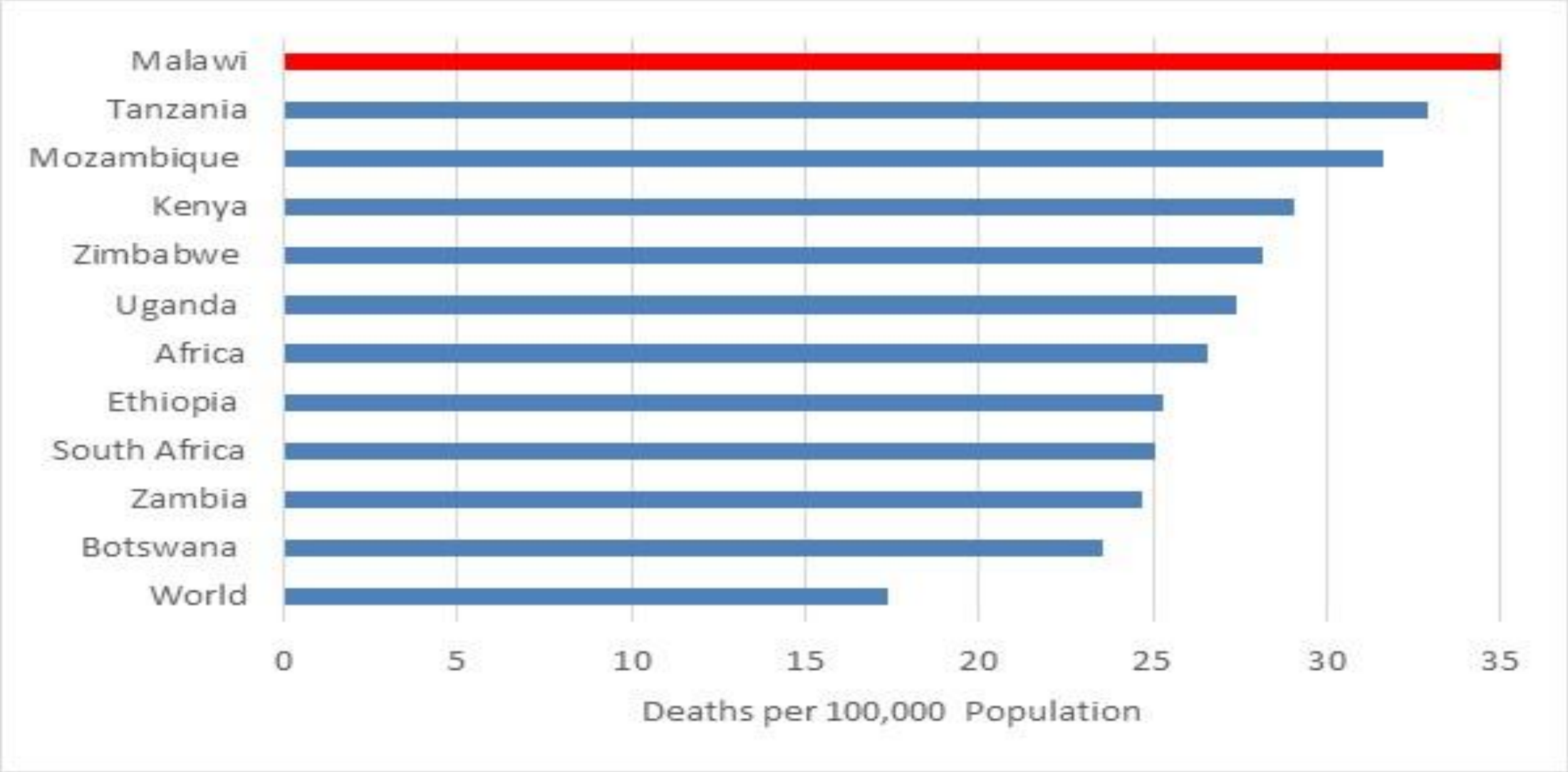
# Health and economic justification for introducing a levy on motor vehicle insurance

- Globally, road traffic related injuries and deaths have become a major public health and development problem
- Low and middle-income countries account for 90 percent of global road traffic deaths with the most affected being the economically active population aged between 15 and 29 years
- Road traffic injuries place a heavy burden on national economies and households. Economic costs at national level are huge and impose a significant burden on health, insurance and legal systems
- In low- and middle-income countries, road traffic injuries and deaths are estimated to cause economic losses of up 5% of GDP
- In Malawi, the increased number of motor vehicles over the period 1995-2015 has contributed to a significant increase in the number of road traffic accidents i.e. about 3.4 accidents per vehicle on average over the period 1995-2015
- **Malawi's road traffic fatality rate of 35 deaths per 100,000 population is above the African regional average of 26.6 deaths per 100,000 population, and twice the global average of 17.4 deaths per 100,000 population**
- **Monetary value of insurance claims for road traffic injuries/deaths increased by 925% between 2008 and 2014, or from a share of 5% of the total monetary value of motor vehicle insurance claims in 2008 to 50% in 2014**

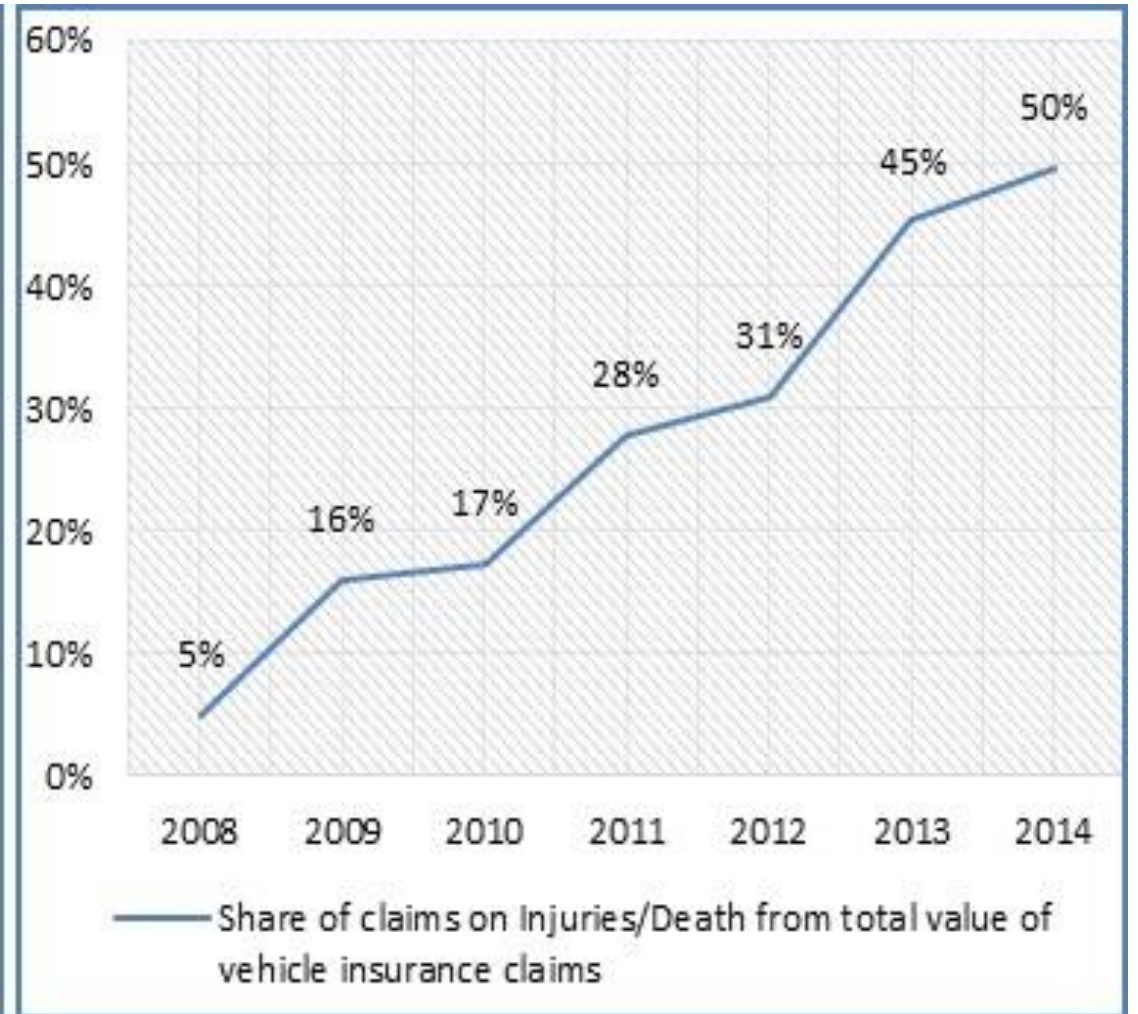
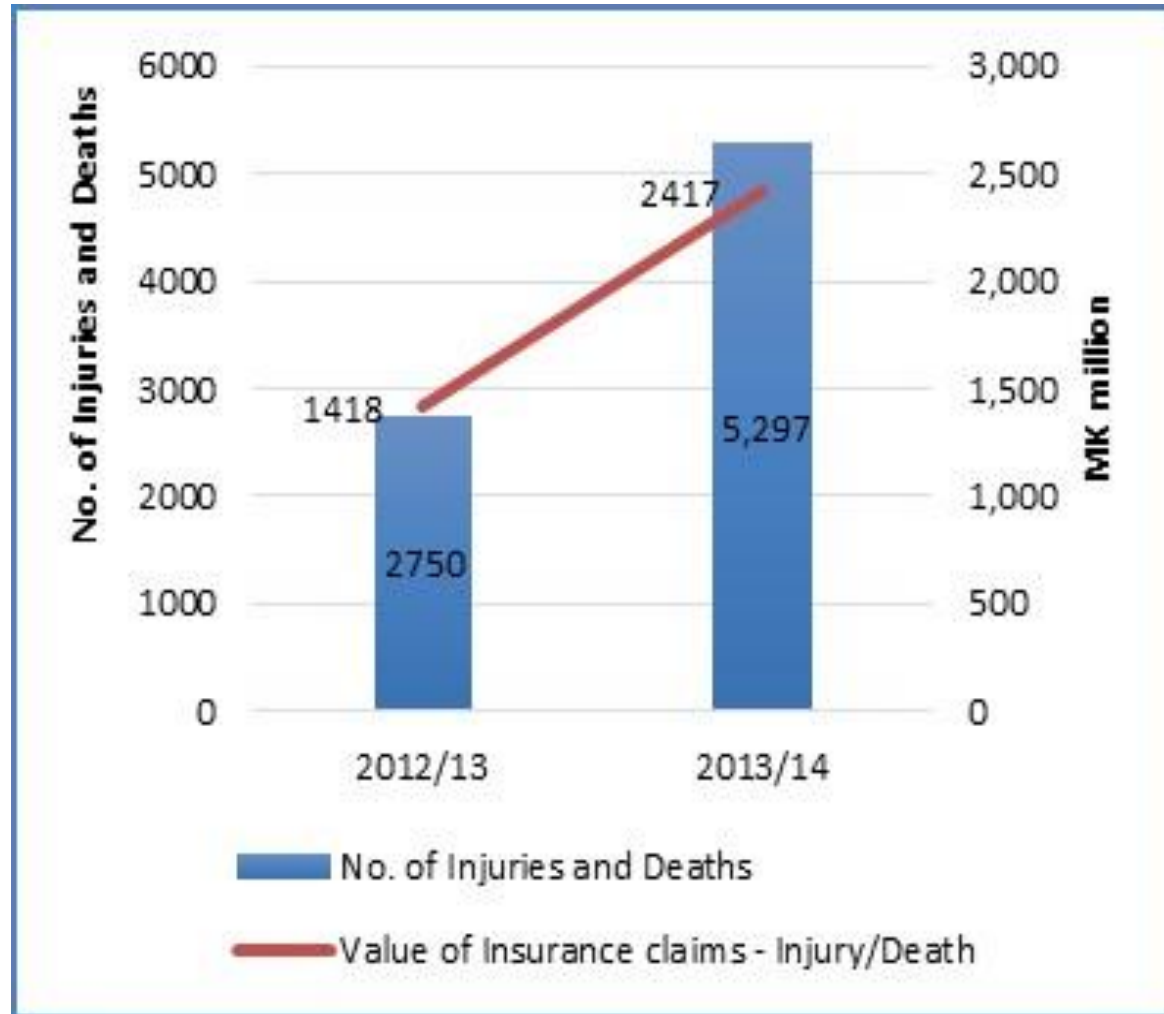
# No. of Vehicles vs Accidents: Malawi 1995-2015



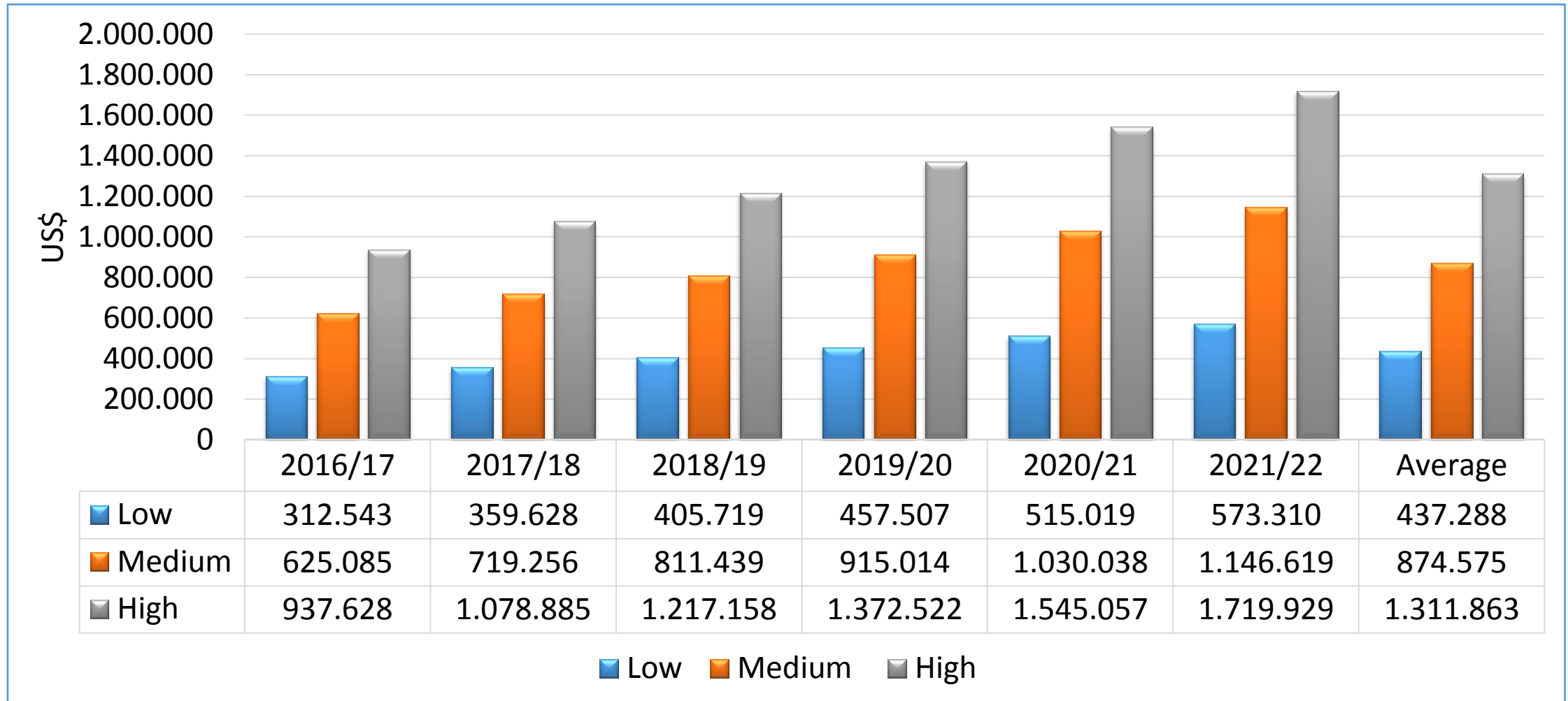
# Road traffic fatality rates per 100,000 population (2013)



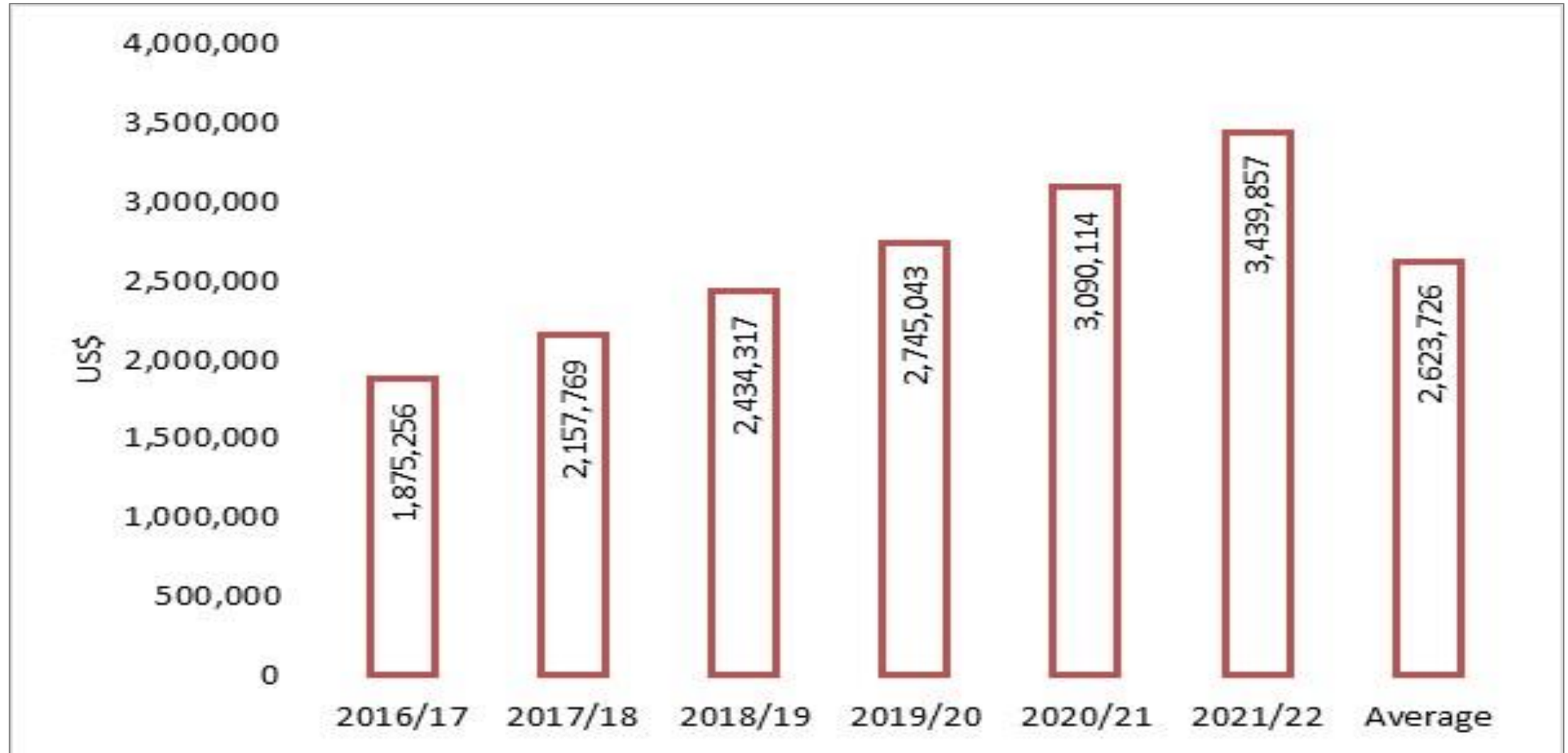
# Road Accident related Injuries and Deaths and insurance claims



# Revenue Generation Potential – Tax/levy on Motor Vehicles Insurance (US\$)



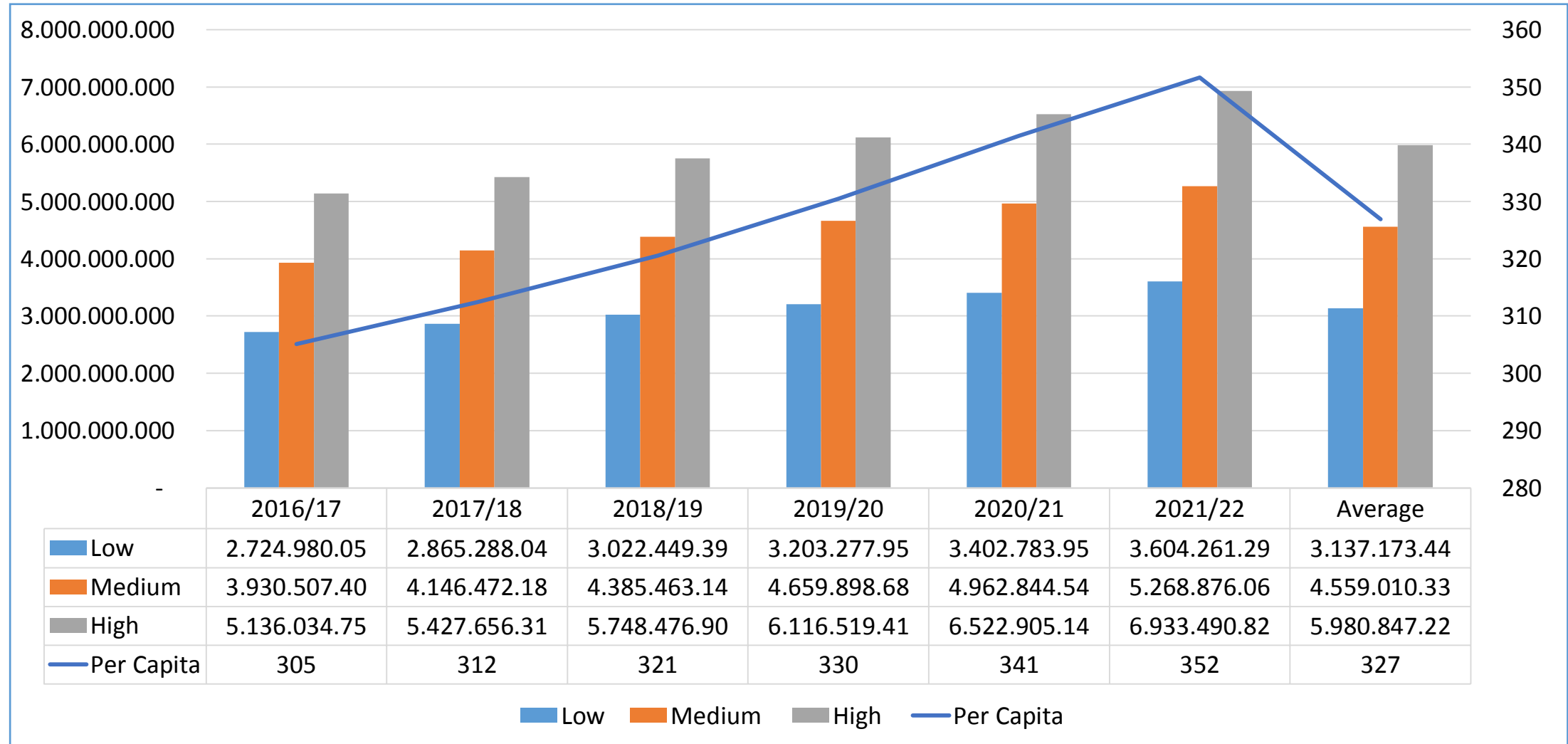
# Potential Revenue - Third Party Motor Compensation Fund (US\$) – 3<sup>rd</sup> Party Motor Insurance Premiums only



# SUMMARY – FUEL LEVIES & TAX ON MOTOR INSURANCE PREMIUMS (US\$)



# SUMMARY – FUEL LEVIES & TAX ON MOTOR INSURANCE PREMIUMS (MK)





# REVENUE COLLECTION & ADMINISTRATION

- Other than creating a new Agency or Institution, monies mobilized through earmarked taxes should be administered through a Fund or budgetline and managed by a dedicated Unit within the Ministry of Health
- The Fund/budgetline must be established by an Act of Parliament which should legislate the sources and use of finances
- **A detailed proposal on revenue collection, pooling, use of funds, flow of funds, provider payment mechanism, financial accountability mechanisms, and monitoring and evaluation should be provided for in the legislation**
- **Monies from** the Health Fund could be used to finance: (i) A specific programme (MNCH), disease (HIV/AIDS or NCDs), or cost item such as medicines; (ii) Specified level of health care, target group, or geographical area, or (iii) Management of service level agreements between the MOH and CHAM
- Regardless of the managerial and institutional arrangements which will be put in place, there should be clear linkages to the EHP and other health reform areas such as health insurance, hospital reforms, and decentralization

# CONCLUSIONS AND RECOMMENDATIONS

- Additional finances for health could be mobilized from domestic sources by
  - Replacing the existing storage levy with a medical levy
  - Allocating a share of the existing rural electrification (MAREP) levy to health
  - Imposing a health tax on third party and comprehensive motor vehicle insurance cover
- To a large extent, our proposal maintains the status quo through the use of already existing levies and thereby limiting potential adverse effects
- Need to conclude discussions with the Ministry of Natural Resources, Energy and Mining regarding the use of part of future revenues from the MAREP levy
- The Reserve Bank of Malawi seeks to establish a Road Accident Fund (RAF)
  - However, use of third party motor insurance premiums alone wouldn't be enough to compensate all road traffic accident victims for medical and funeral expenses, loss of earnings, and loss of support
  - In other countries in Africa (Botswana, Namibia, and South Africa) where RAFs have been successful, the main source of revenue has been from fuel levies. But for Malawi, it will be difficult to introduce a new levy on fuel to cater for the RAF without adverse effects

# CONCLUSIONS AND RECOMMENDATIONS ...

- Notwithstanding the above findings, the Malawian Government should strive to increase overall government spending to support the health sector through the broader tax system
- Emphasis should be on improved efficiency in overall revenue collection by Malawi Revenue Authority
- If earmarked taxes are used, decisions should be made with a full understanding of the broader constraints and priorities
- Considering that the Malawian Government is in the process of reviewing the overall tax system, all proposals on earmarked taxes in the health sector should be aligned to the overall tax reform process

**THE END**