



**Without migration there's no future**

**The challenge of a sustainable social security system in  
Aruba**

**SYMPOSIUM MIGRATION AND SOCIOECONOMIC DEVELOPMENT**

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# 1. Introduction: Social Security Aruba



# 1. Introduction: Social Security Aruba

“**Social security** is the **protection** that a society provides to individuals and households to ensure access to health care and to guarantee income **security**, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner.”

International Labour Organization (ILO)



# 1. Introduction: Social Security Aruba

The Social Security system of Aruba comprises of the following programs:

- A. Programs of universal coverage
  - 1. Old age pension (AOV)
  - 2. Widow and orphan pension (AWW)
  - 3. Health care cost (AZV)
  
- B. Social insurances
  - 1. Sickness insurance (ZV)
  - 2. Labour accident insurance (OV)
  - 3. Lost job compensation (Cessantia)

## 2. Challenges for the Social Security in Aruba



## 2. Challenges for the Social Security in Aruba

Two mayor developments are distinguished to excercise great pressure on the cost of Social Security:

1. Demographic transition
2. Epidemiological transition.

Three factors are distinguished to restrict the income of the Social Security system:

- Economic growth
- Public finance/debt
- Tax burden/pressure

# 3. Demographic transition





## 3.1 What is demographic transition?

Basic definition:

The transition from high birth and death rates to lower birth and death rates.

Demographic transition results in the ageing of the population.

Ageing: the relative portion of the population 60+ increase in time.



## 3.2 What causes ageing?

Two main developments result in ageing:

### 1. Lowering of the Total Fertility Rate:

- TFR: the average children for every female in the age of 14 to 49.
- TFR of Aruba in 2015 was 1.8. **It felt below the replacement rate of 2.1.**

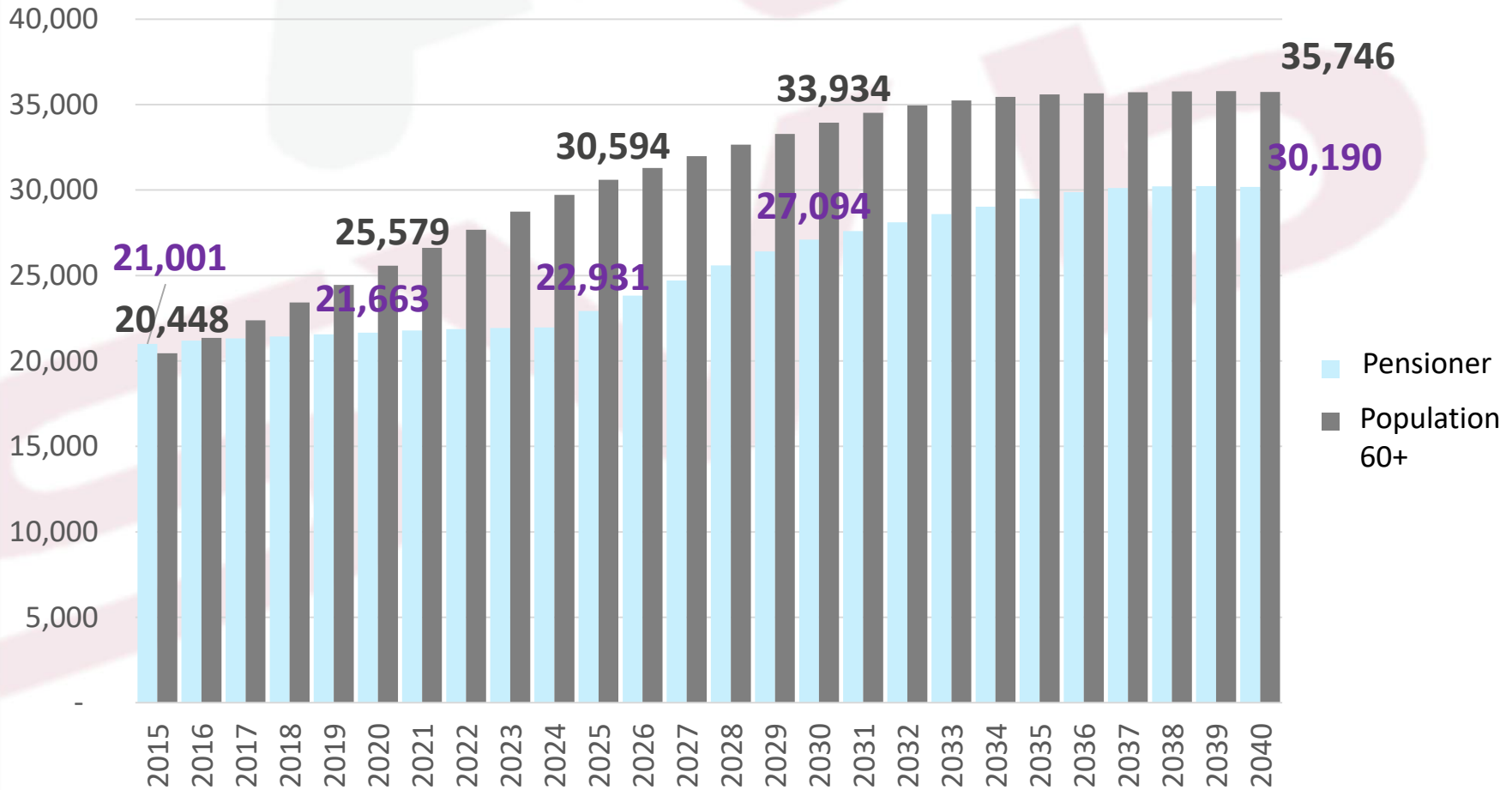
### 2. Increase in life expectancy (LE):

- People are living longer
- LE of Aruba in 2015 was 80.7.



## 3.3 Ageing of the Aruban population

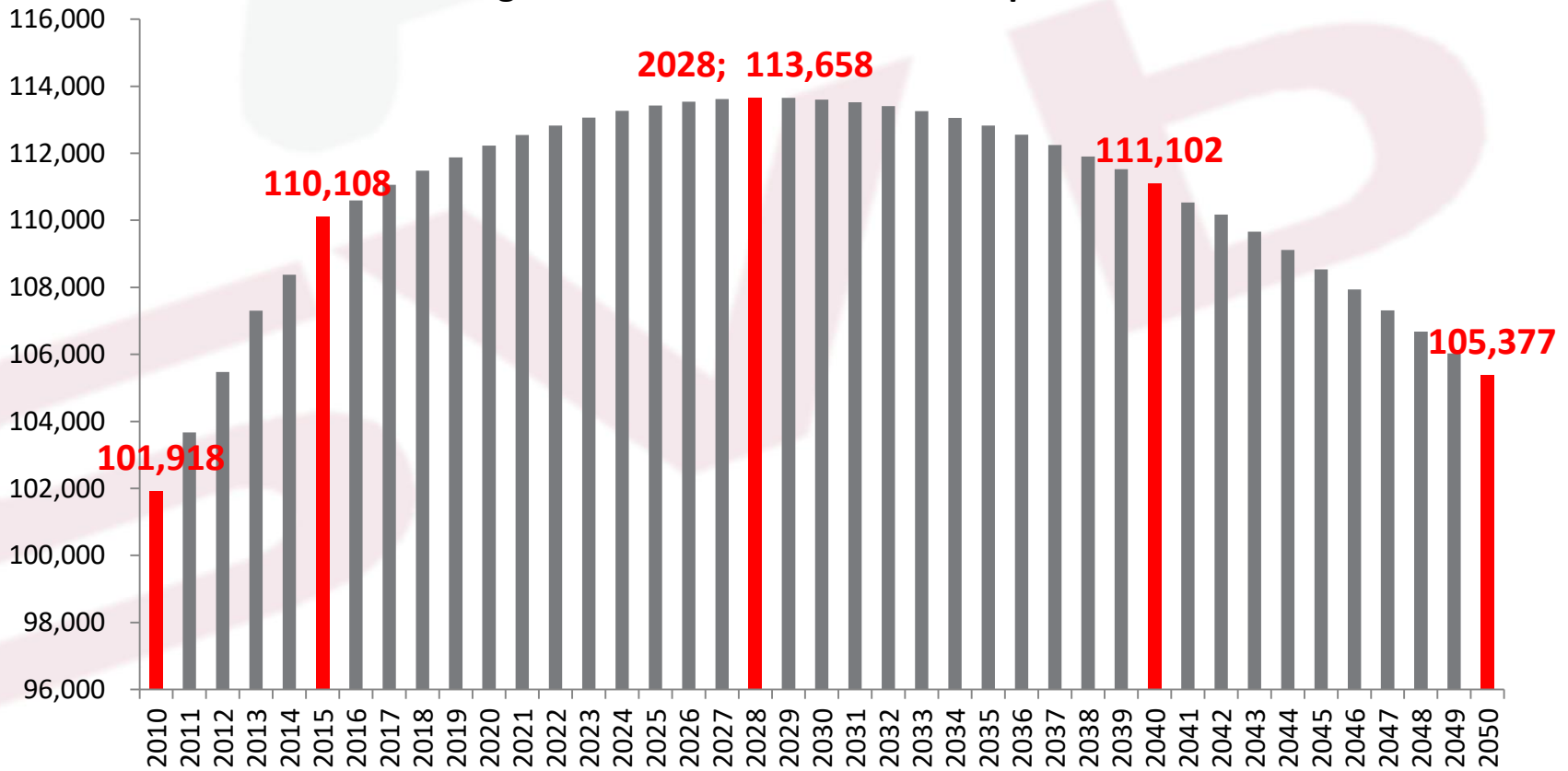
Projection of the Aruban population of 60+ and the amount of pensioners in the period 2015-2040





## 3.3 Ageing of the Aruban population

Population projection of Aruba, without migration in the period 2010-2050, illustrating the effect of the TFR below replacement rate





## 3.4 Impacts of ageing

- The amount of pensioners will increase drastically, resulting in increase of the old age pension cost.
- The production capacity of the population will decrease, which will impose economic challenges.
- Increase of the segment of the population with a high consumption of health care, resulting in an increase of the health care cost.



# 3.5 Impacts of ageing on Old Age Pension Fund

Important assumption:

- The pension maintains its buying power during projection period.

**Cost projection of the Old Age Pension Fund in real terms during 2015-2035**



Average yearly growth:

- 2015-2025: 0,9%

- 2025-2035: 2,6%

## 4. Epidemiological transition



## 4.1 What is epidemiological transition?

“As life expectancy increases, the major causes of death and disability in general shift from communicable, maternal and perinatal causes to chronic, non communicable ones.”

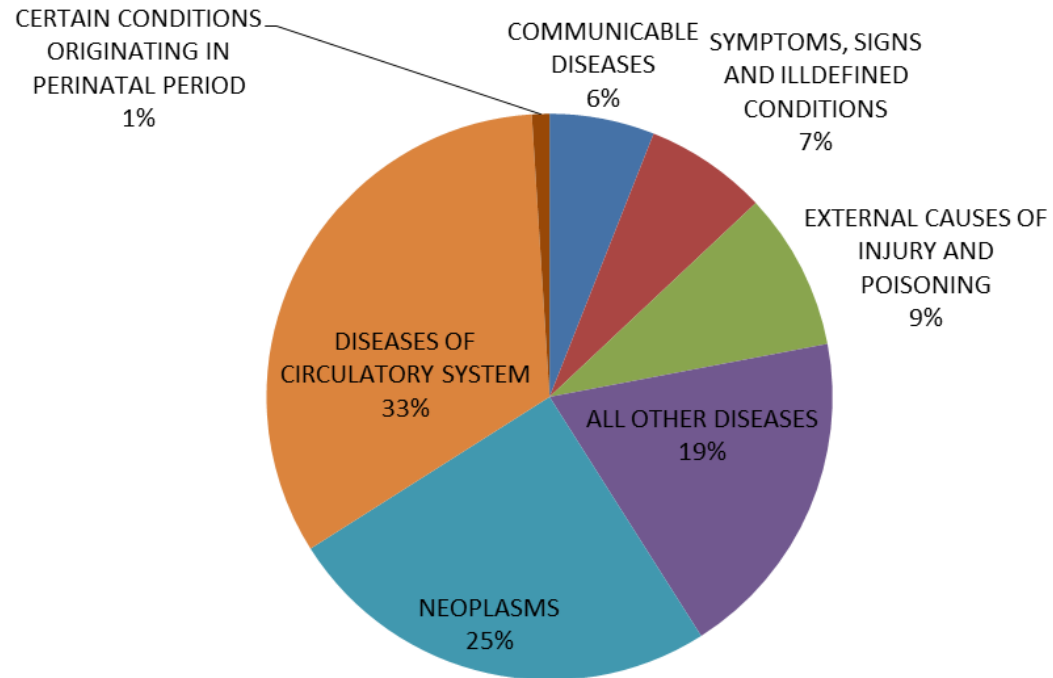
World Health Organisation

Additionally, non communicable diseases (NCD's) will appear at younger ages.



## 4.2 Non communicable diseases (NCD) in Aruba

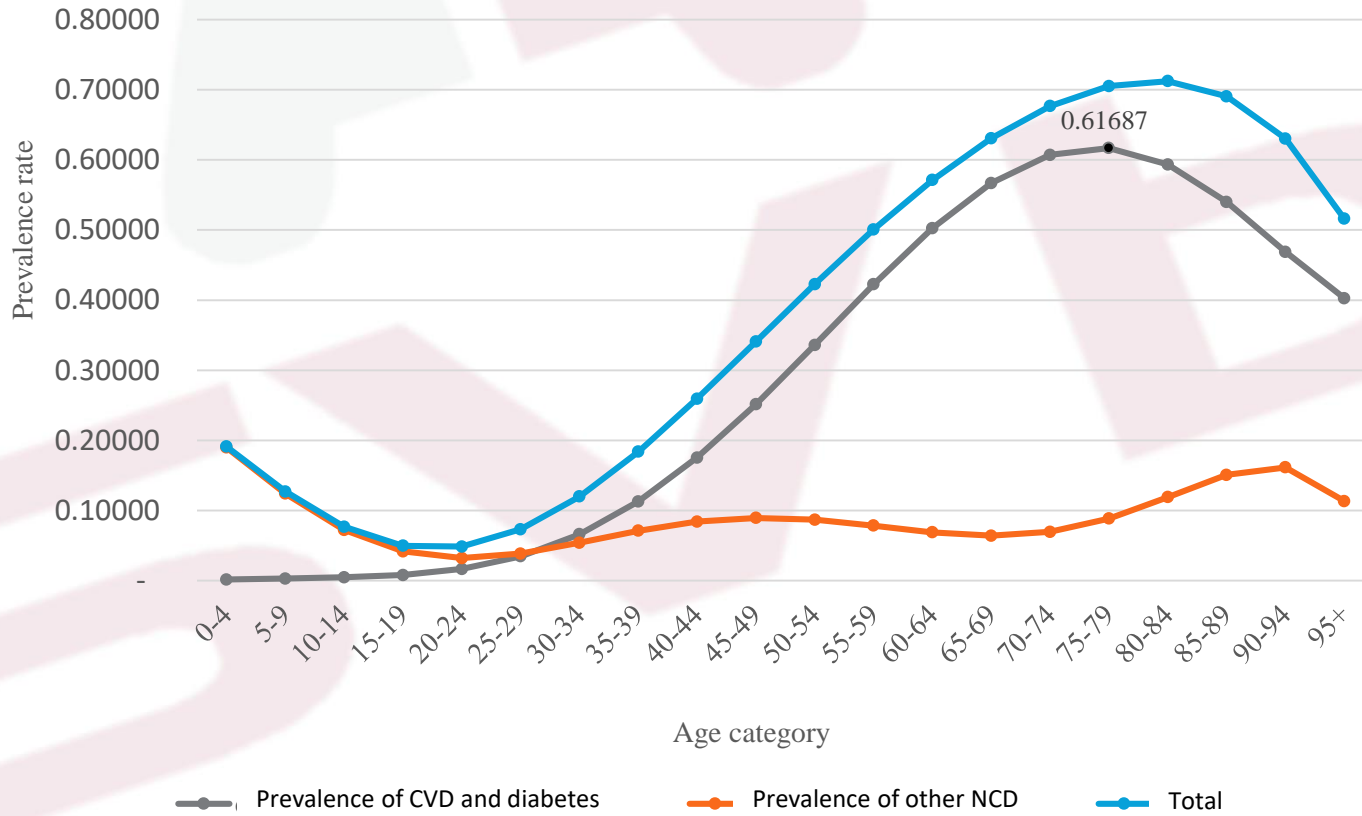
**Mortality by causes of death (ICD-67), Aruba period 2000-2010.**



At least, 58% of deaths were caused by NCD's in the period 2000-2010

# 4.3 Projection of NCD in Aruba 2015-2035

Prevalence rate of NCD among the Aruban male population in 2015



CVD = cardio vascular diseases

NCD = non communicable diseases

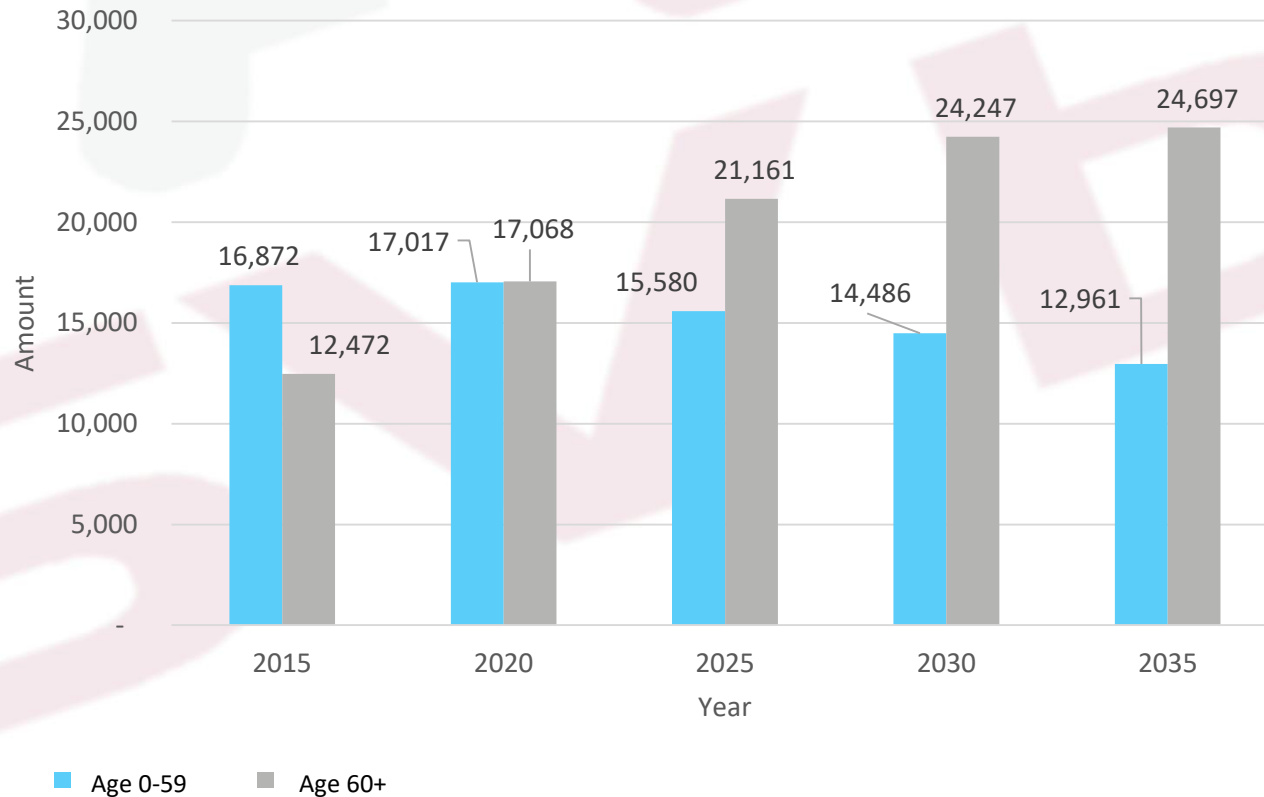
Other NCD = cancer, blood disease, rheumatism, pulmonary diseases and HIV\*

Source: Database AZV  
Own elaboration



## 4.3 Projection of NCD in Aruba 2015-2035

Projection of the Aruban population with prevalence for CVD and diabetes in the period 2015-2035, assuming no migration.



Source: own projections

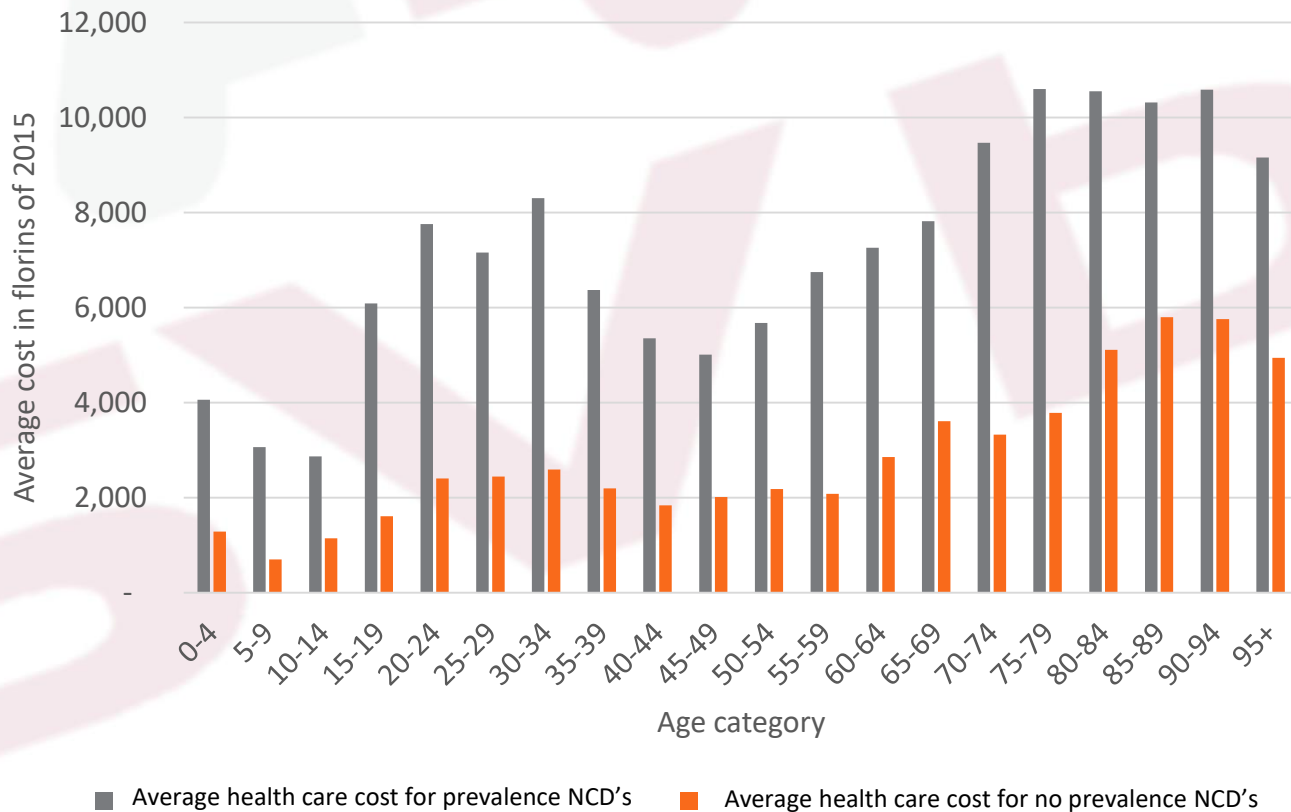


## 4.4 Impact of NCD's

- Labour force with NCD's will increase, resulting in more sick-leave and an increase in the cost of the sickness insurance.
- The population with NCD's will increase, along the use of health care too, resulting in an increase of the health care cost.

# 4.5 Impact of NCD's and ageing on health care cost

Average cost profile of the female population in florins of 2015 by age category



# 4.5 Impact of NCD's and ageing on health care cost

**Projection of the health care cost in real term in the period 2015-205**



Source: own projections

Average yearly growth:

- 2015-2025: 2,4%

- 2025-2035: 1,6%

## 5. The challenge of sustainability



## 5.1 Definition sustainability

Sustainability is assessed by confronting projected cost with income.

van Ewijk et al:

Sustainability requires that present policies can be maintained without incurring financial problems in the (distant) future.

When assessing the sustainability we have to seek an answer for the following question:

Does Aruba have the capacity to generate the necessary income to finance the projected cost of the Social Security?





## 5.1 Definition sustainability

The sources of income of the Social Security are:

1. Premiums of the contributors
2. Assigned tax
3. Government contribution

At the end, the increase of the income of the Social Security depends on the tax pressure and the performance of the economy.



## 5.2 Assessing the potential of the Aruban economy

Can the Aruban economy in the future generate sufficient income through premiums and taxes to:

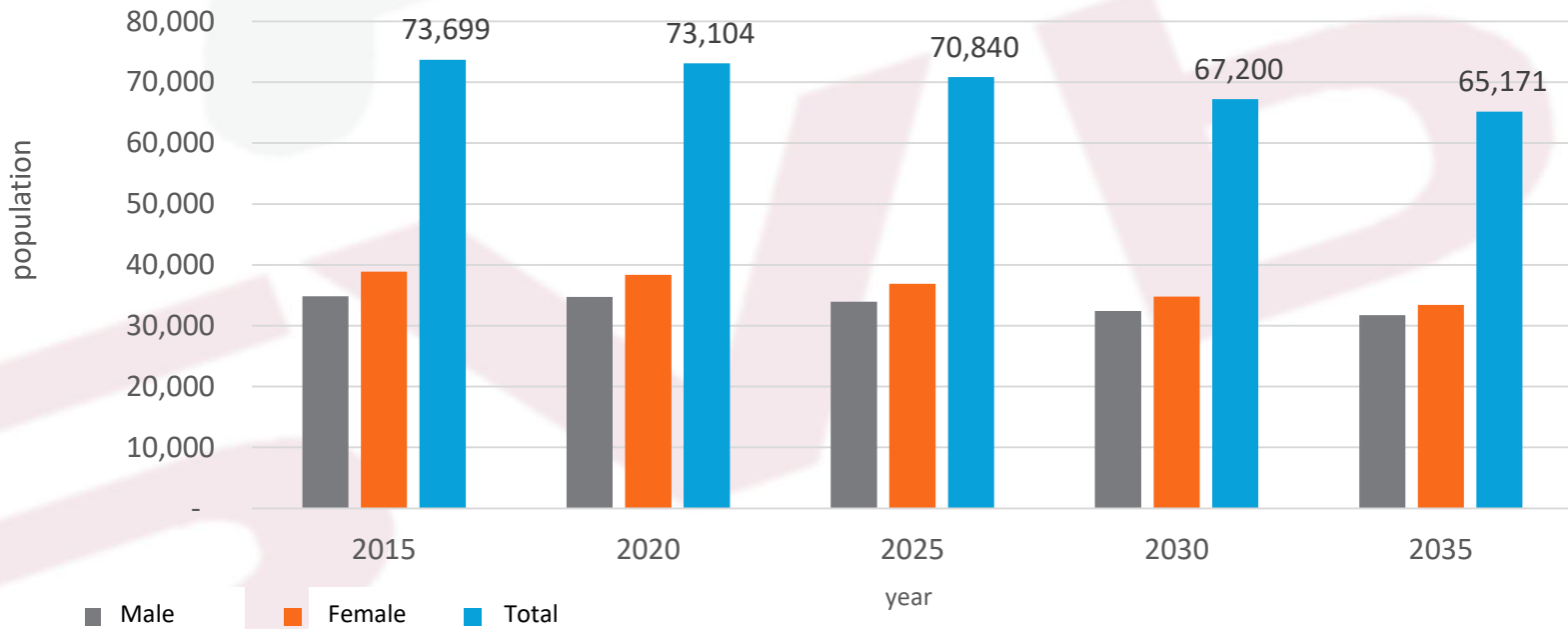
- To cover the cost of Social Security projected to grow an average of **1,9% yearly** in real term?

Does the Aruban population have the potential to deliver the necessary labour force to the economy?



## 5.2 Assessing the potential of the Aruban economy

Projection of the population with potential to become economic active (age 15-64) without migration in the period 2015-2035, based on the population of 2015

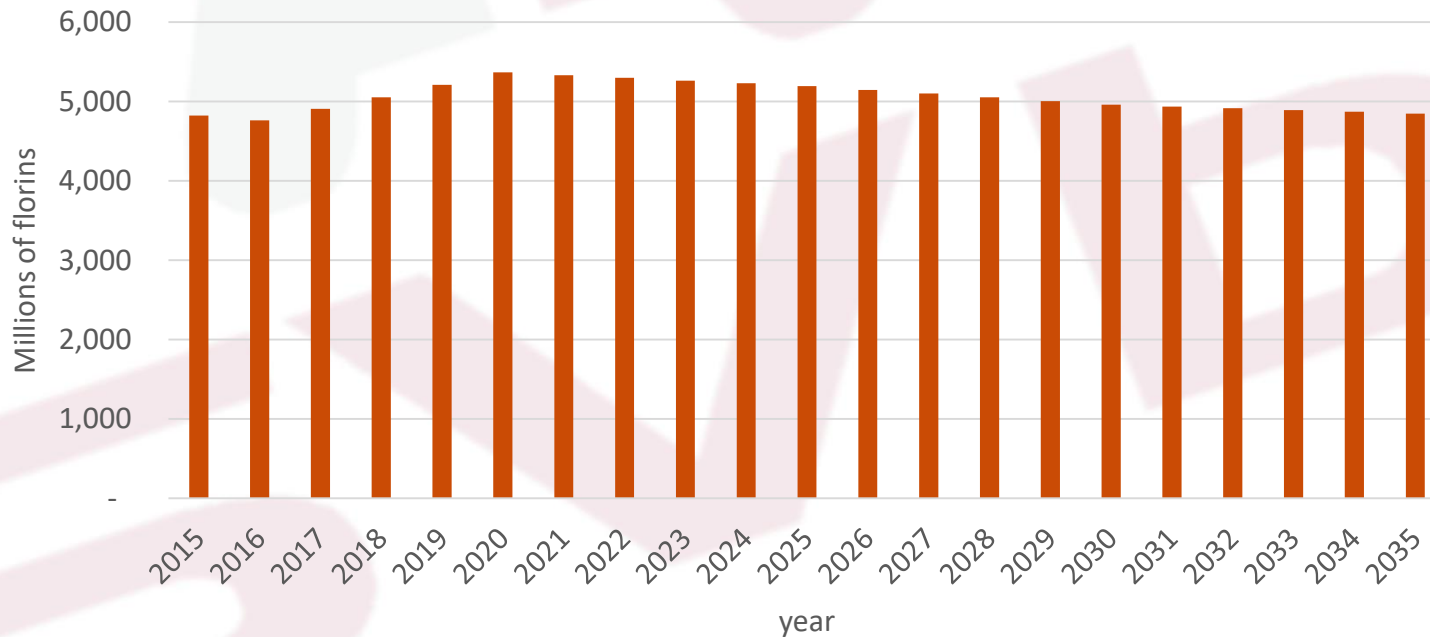


The population with potential to become economic active will decrease with 12% during the projecting period 2015-2035, assuming there will be no migration.



## 5.2 Assessing the potential of the Aruban economy

Projection of the GDP in nominal term between 2015-2035, assuming there will be no migration.



The projection shows an increase in GDP till 2020. Afterwards the economy will shrink in nominal terms reaching in 2035 a level below that of 2015. In real term, the shrinkage will be greater.

**Conclusion: the population of 2015 does not have the productive potential to expand the economy in the future.**



## 5.3 Assessing the need for migration

Conclusion former sheet:

Only through migration can the economy grow the coming years.

Migration is needed for:

- a. Replacement of workers going with pension
- b. Expanding the economy
- c. Household work and care

In our study three main kind of migration is distinguished based on their purpose:

- Labour
- Family reunification
- Household work/elderly care

Two economic scenarios has been used to project the need for migration:

1. An average nominal growth of 2,5% yearly (0,4% real)
2. An average nominal growth of 3,0% yearly (0,9% real)

Reminder: Social Security costs are projected to grow on an average of 1,9% real yearly.



## 5.3 Assessing the need for migration

Projected shortage of labour, assuming no migration in projection period:

<b>Economic scenario</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
2,5% nominal	993	5,534	10,657	15,679
3,0% nominal	1,324	6,545	12,540	18,665



## 5.3 Assessing the need for migration

In order to grow the economy with 2,5% nominal (0,4% real) the following amount of migration is needed:

<b>Kind of migration</b>	<b>2015-2020</b>	<b>2020-2025</b>	<b>2025-2030</b>	<b>2030-2035</b>	<b>Total</b>
Labour	432	3,929	3,481	2,897	10,740
Reunification	503	4,581	4,058	3,378	12,519
Household	561	529	488	467	2,045
<b>Total</b>	<b>1,496</b>	<b>9,039</b>	<b>8,027</b>	<b>6,742</b>	<b>25,304</b>

## 5.3 Assessing the need for migration

In order to grow the economy with 3,0% nominal (0,9% real) the following amount of migration is needed:

<b>Kind of migration</b>	<b>2015-2020</b>	<b>2020-2025</b>	<b>2025-2030</b>	<b>2030-2035</b>	<b>Total</b>
Labour	763	4,547	4,121	3,680	<b>13,112</b>
Reunification	890	5,300	4,804	4,290	<b>15,284</b>
Household	561	529	488	467	<b>2,045</b>
<b>Total</b>	<b>2,214</b>	<b>10,377</b>	<b>9,413</b>	<b>8,438</b>	<b>30,441</b>



## 6. Conclusion



## 6. Conclusionnan

1. The demographic and epidemiological transitions will have great impact on the cost of the Social Security system of Aruba.
2. The Social Security depends heavily on economic growth in order to attend its sustainability issue.
3. The population of 2015 does not have the potential to increase economic production in the future.
4. Migration is indispensable in seeking sustainability of the Social Security system of Aruba.



# Danki pa e atencion



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