



CÔTE D'IVOIRE'S NTA PROFILE AND THE NATIONAL DEMOGRAPHIC DIVIDEND OBSERVATORY



Presented by : Dr Moustapha HININ, Director-General, National Population Office (ONP), Côte d'Ivoire
Ms. Fatou DIARRASSOUBA, Technical Advisor, National Population Office (ONP), Côte d'Ivoire

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Observatoire Population et Développement
un Outil pour le Suivi du Dividende
Démographique

PRESENTATION PLAN



- 1. COUNTRY CONTEXT**
- 2. NTA PROFILE AND MEASUREMENT OF THE DEMOGRAPHIC DIVIDEND**
- 3. KEY RESULTS OF THE NATIONAL DEMOGRAPHIC DIVIDEND OBSERVATORY**

1. COUNTRY CONTEXT



SOME BASIC STATISTICS



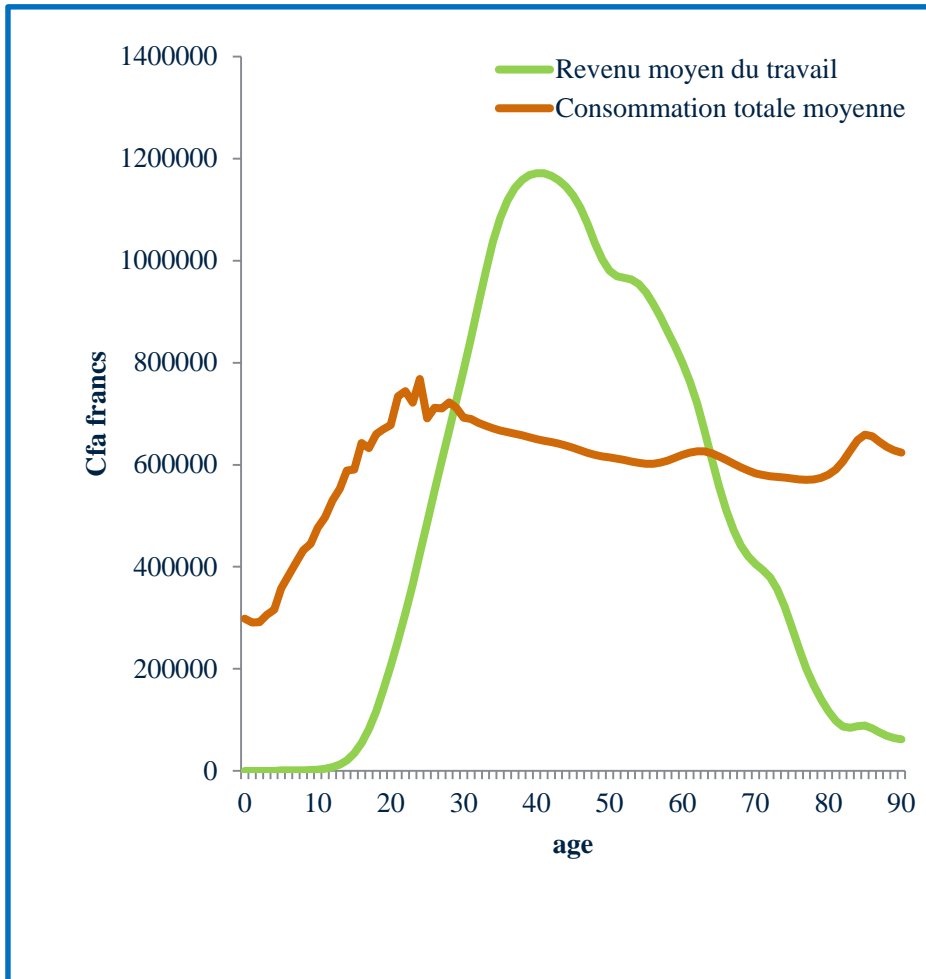
Area	: 322 462 km²
Population	: 22 671 331 hbts
Density	: 72 hbts/km²
Sex ratio	: 107.0
Proportion of urban population	: 49.7%
Total Fertility Rate	: 4.6
Child mortality rate	: 125 per 1 000
Maternal mortality rate	: 614 per 100 000
Life expectancy at birth	: 54.3 years
Real GDP growth rate	: 8.5%
Population growth rate	: 2.6%
Poverty rate	: 46.3%
Human Development Index	: 0.45 (171st/187)

2. NTA PROFILE AND MEASUREMENT OF THE DEMOGRAPHIC DIVIDEND



ECONOMIC LIFE CYCLE

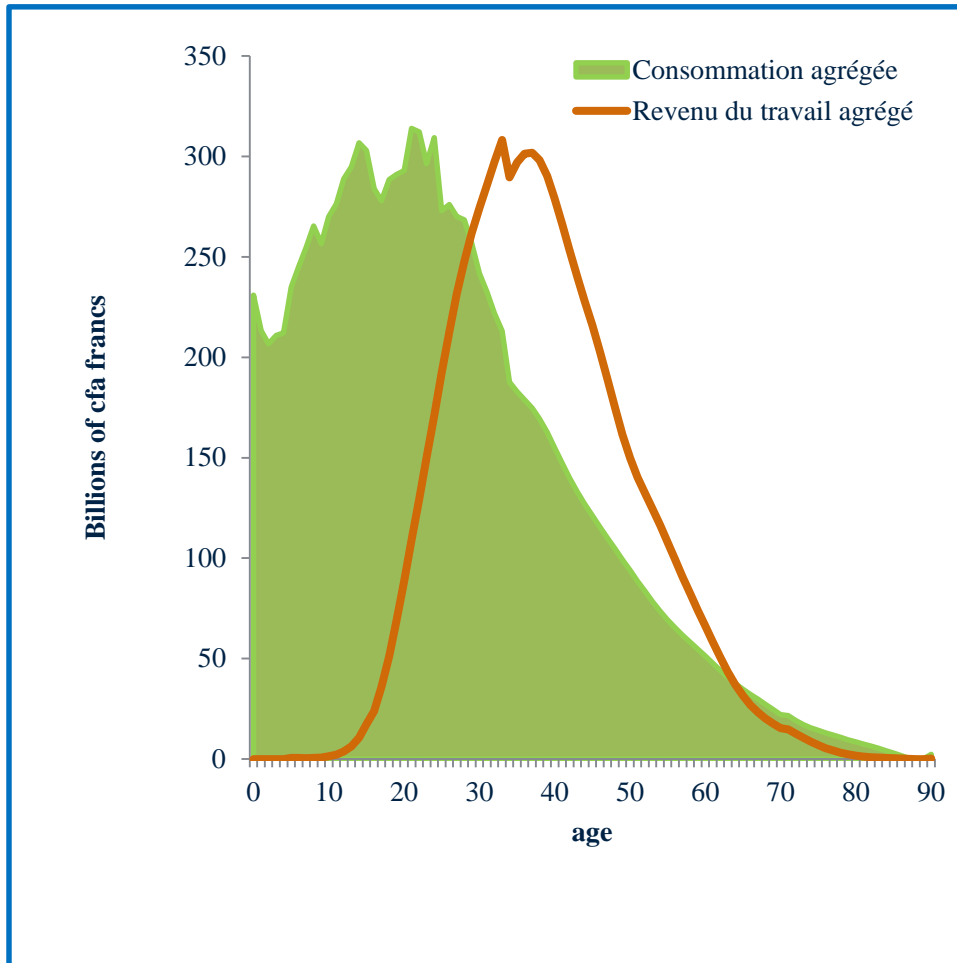
Average consumption and income in 2014



- ❑ Age group generating a surplus: **29-63 years**
- ❑ **Average Surplus:** 342 527 FCFA (USD)
- ❑ Dependent age groups : **0-28 years and 64 years and older**
- ❑ **Average deficit at youth:** 395 930 FCFA (USD)
- ❑ **Average deficit at old age:** 350 757 FCFA (USD)
- ❑ Ivoirian population begins to show a surplus at age 29, reflecting a long period of dependence compared to emerging countries where young people start to generate a surplus between 20-24 years of age

ECONOMIC LIFE CYCLE

Aggregate consumption and income in 2014



- ❑ **Two factors determine the end of dependence:** The age of entry into employment and the income earned at the beginning of a career. A low income at the beginning of a career does not allow the young worker to meet his consumption needs
- ❑ **The highest surpluses are in the 31-55 age group**
- ❑ **Beyond age 55, the surplus is small and becomes negligible from age 65**
- ❑ **The overall life cycle deficit is mainly financed by reallocation of assets and less by net transfers**

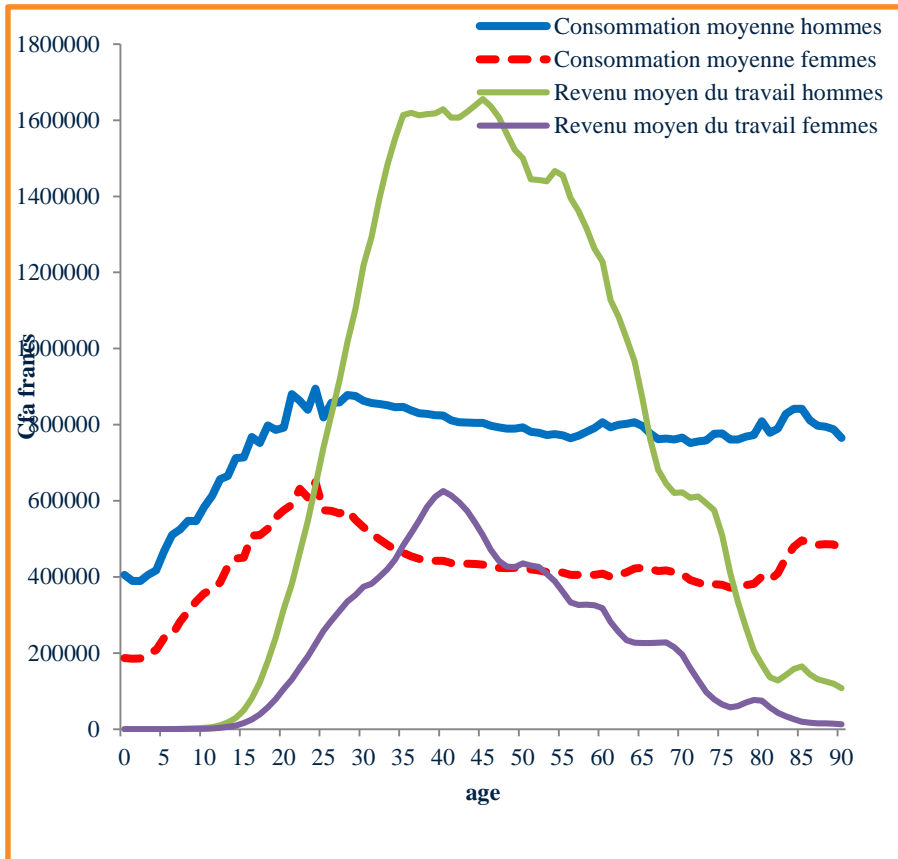
SOCIAL DEMAND

➤ **22.6% OF GDP TO FINANCE**

SUMMARY OF RESULTS	IN BILLIONS OF CFA Francs	IN % OF GDP
Social demand for youth (0-28 years)	6 065.5	36
Social demand for elderly (64 years and up)	134.7	0.6
Overall social demand (youth + old age)	6 200.2	36.6
Surplus in adulthood (29 – 63 years)	2 367.2	14
Balance (Surplus – overall social demand)	- 3 833.0	22.6

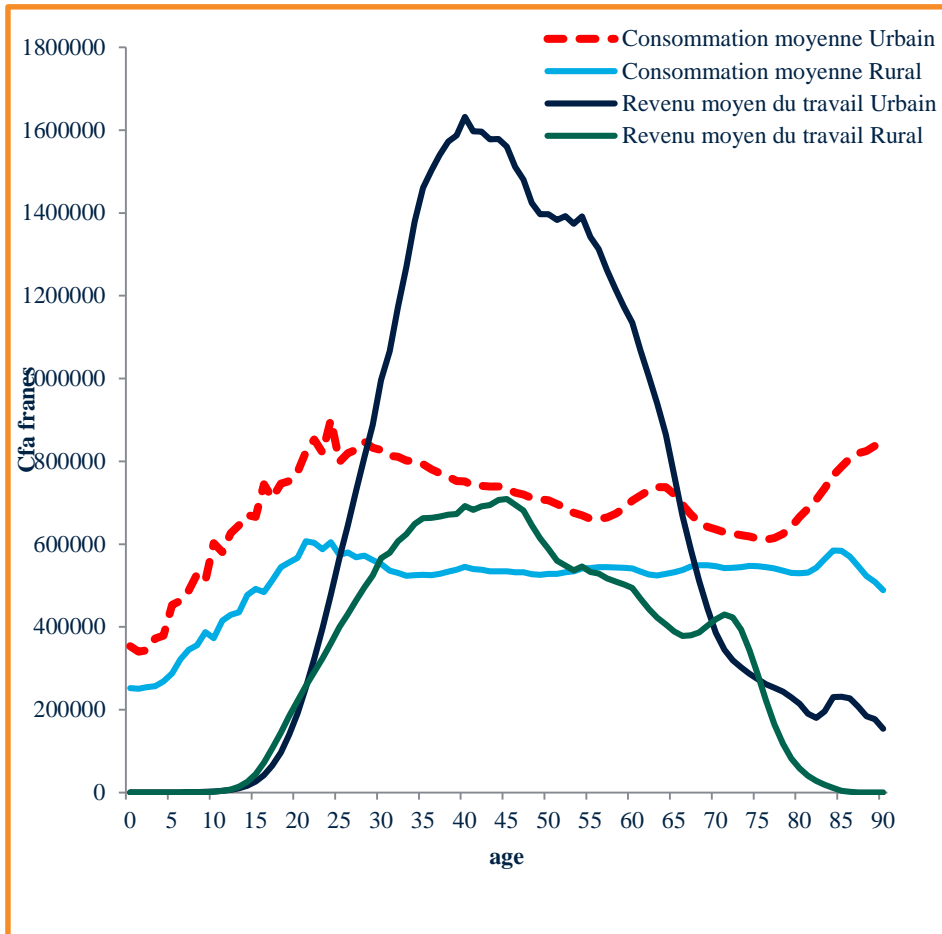
It therefore appears that Côte d'Ivoire has an overall deficit of 3 833 billion CFA francs (22.6% of GDP) that labour income cannot meet.

AVERAGE LIFE CYCLE PROFILE BY SEX



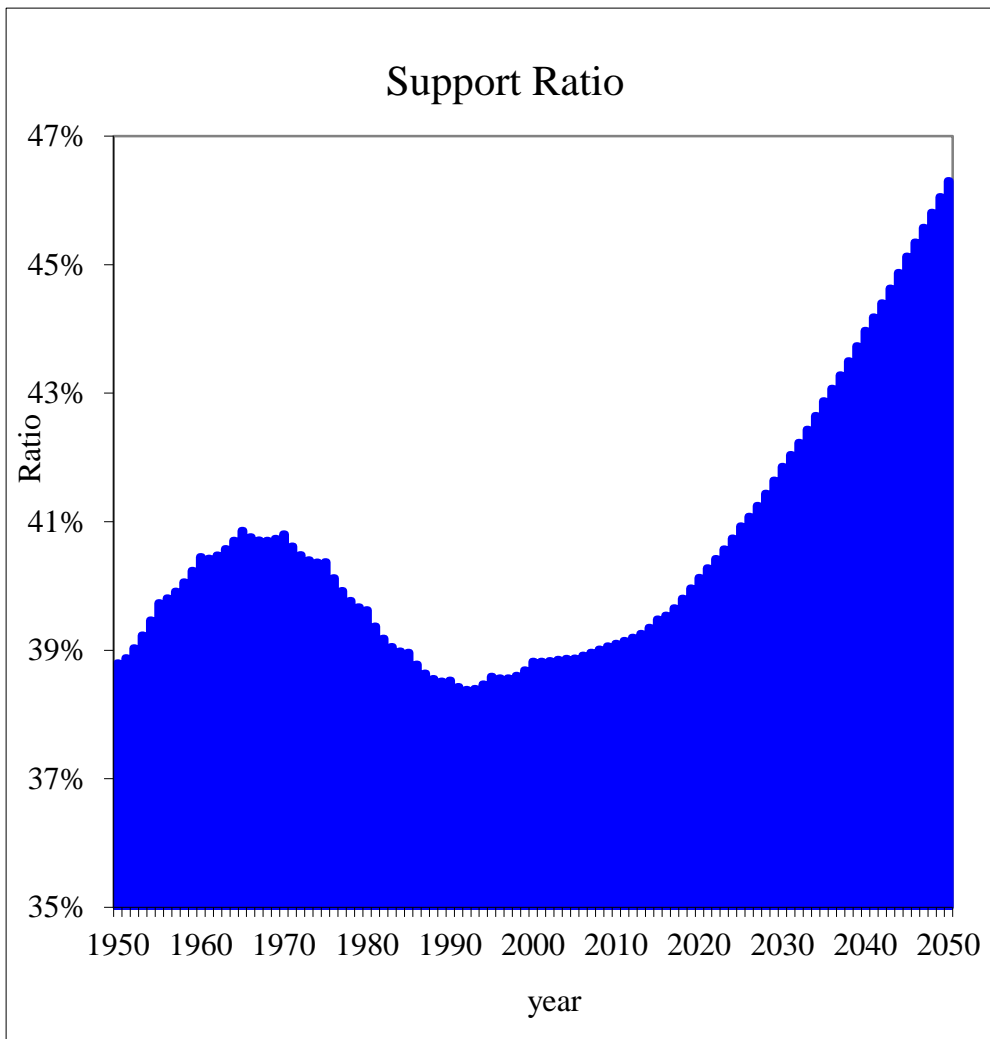
- ❑ Women generate a surplus from **age 35 to 52**
- ❑ Dependent age groups for women: **0-34 years and 53 years and older**
- ❑ Men, generate a surplus from **age 27 to 65**
- ❑ Dependent age groups for men: **0-26 years and 66 years and older**

AVERAGE LIFE CYCLE URBAN/RURAL



- ❑ In rural areas, the surplus is generated **from age 30 to 54**
- ❑ In urban areas, the surplus is generated **from age 29 to 65**
- ❑ Dependent age groups in urban areas: **0-28 years and 66 years and older**
- ❑ Dependent age groups in rural areas: **0-29 years and 55 years and older**

SUPPORT RATIO

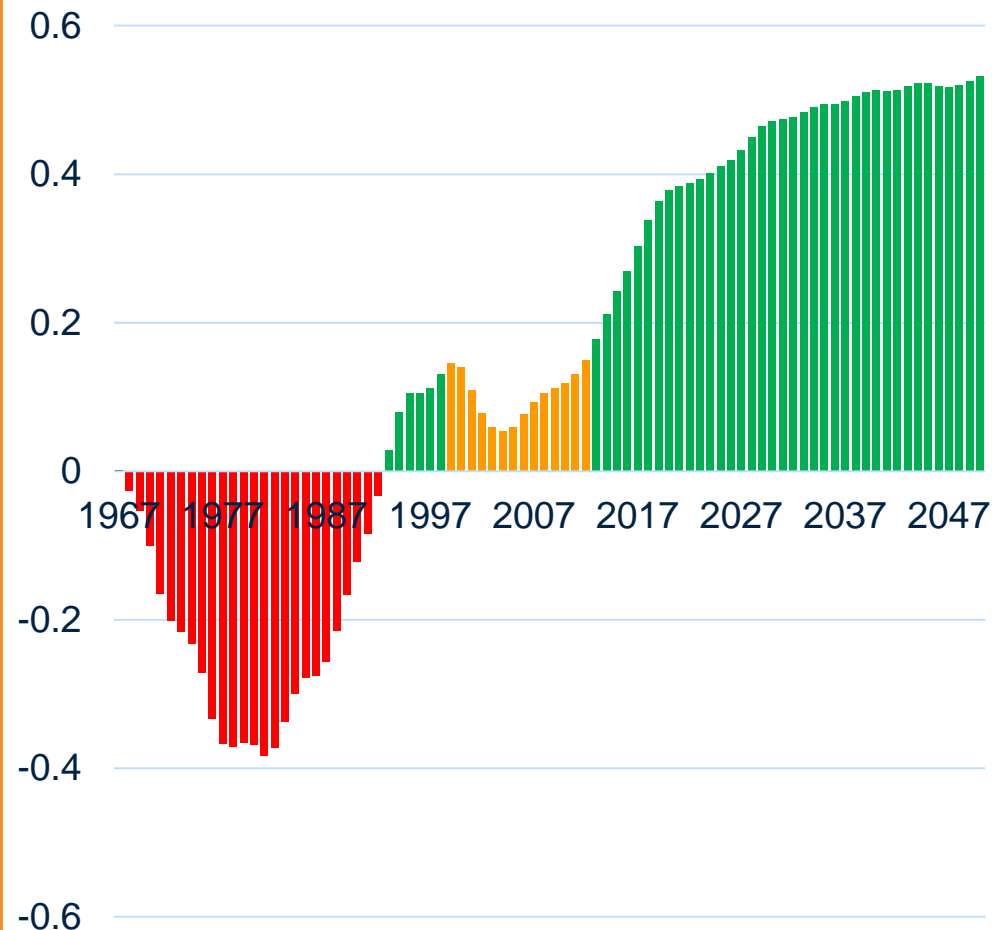


Three main phases

- **1950-1965:** Rise of the support ratio by 2 points (38.8 % to 40.8%)
- **1966-1992:** Fall of the support ratio from 40.8 % to 38.4 %
- **From 1993:** A new rise corresponding to the opening of the demographic window of opportunity with a posted value of the support ratio of 38.4; actual workers per 100 consumers gained one point in 2016 (39.3%)

THE FIRST DEMOGRAPHIC DIVIDEND

Demographic Dividend in CIV



- ❑ Negative growth of the support ratio between 1967-1992
- ❑ Beginning of positive growth of the support ratio in 1993 = **opening of the demographic window of opportunity**
- ❑ Break in the upward trend from 1999 to 2006: **Period of politico-military crises**
- ❑ Increase in the support ratio since 2007, **which stood at 0.21% in 2014 and nearly 0.27% in 2016**

The first Demographic Dividend is therefore estimated at 0.21% in 2014 and 0.27% in 2016

3. KEY RESULTS OF THE NATIONAL DEMOGRAPHIC DIVIDEND OBSERVATORY



DIMENSION I: LIFE CYCLE DEFICIT

Definition:

Refers to the ratio of the surplus generated by economically independent age groups to the deficit of economically dependent age groups

Measuring Indicator: Economic Dependency Coverage Index (ICDE)

Measures a country's ability to face social demand or to fill the consumption gap related to the life cycle deficit of youth and old age

CALCULATION METHOD

$$ICDE = \frac{\sum_a LCD(a)D_{[C(a) < YL(a)]}}{\sum_a LCD(a)D_{[C(a) \geq YL(a)]}}$$

where $LCD(a)$ refers to the life cycle deficit at age a ; $D_{[C(a) < YL(a)]}$ is an indicating function that takes the value 1 if an individual's consumption is lower than his labour income and 0 otherwise; and $D_{[C(a) \geq YL(a)]}$ is an indicating function that takes the value 1 if an individual's consumption is greater than or equal to his labour income and 0 otherwise

In other words :

$$ICDE = \frac{\text{aggregate Surplus}}{\text{aggregate Deficit}_{youth} + \text{aggregate Deficit}_{senior}}$$

DIMENSION I: LIFE CYCLE DEFICIT

Estimations results :

The ICDE is estimated at **0.382**



The surplus generated by labour income covers only **38.2%** of the deficits incurred by youth and the elderly

	Urban area	Rural area	Men	Women	Overall Côte d'Ivoire
ICDE	0.57	0.11	0.655	0.053	0.382

DIMENSION II: QUALITY OF LIVING ENVIRONMENT

Definition:

Designed as the set of factors that contribute to a person's quality of life

Measuring indicator: Quality of Living Environment Index (IQCV)

CALCULATION METHOD

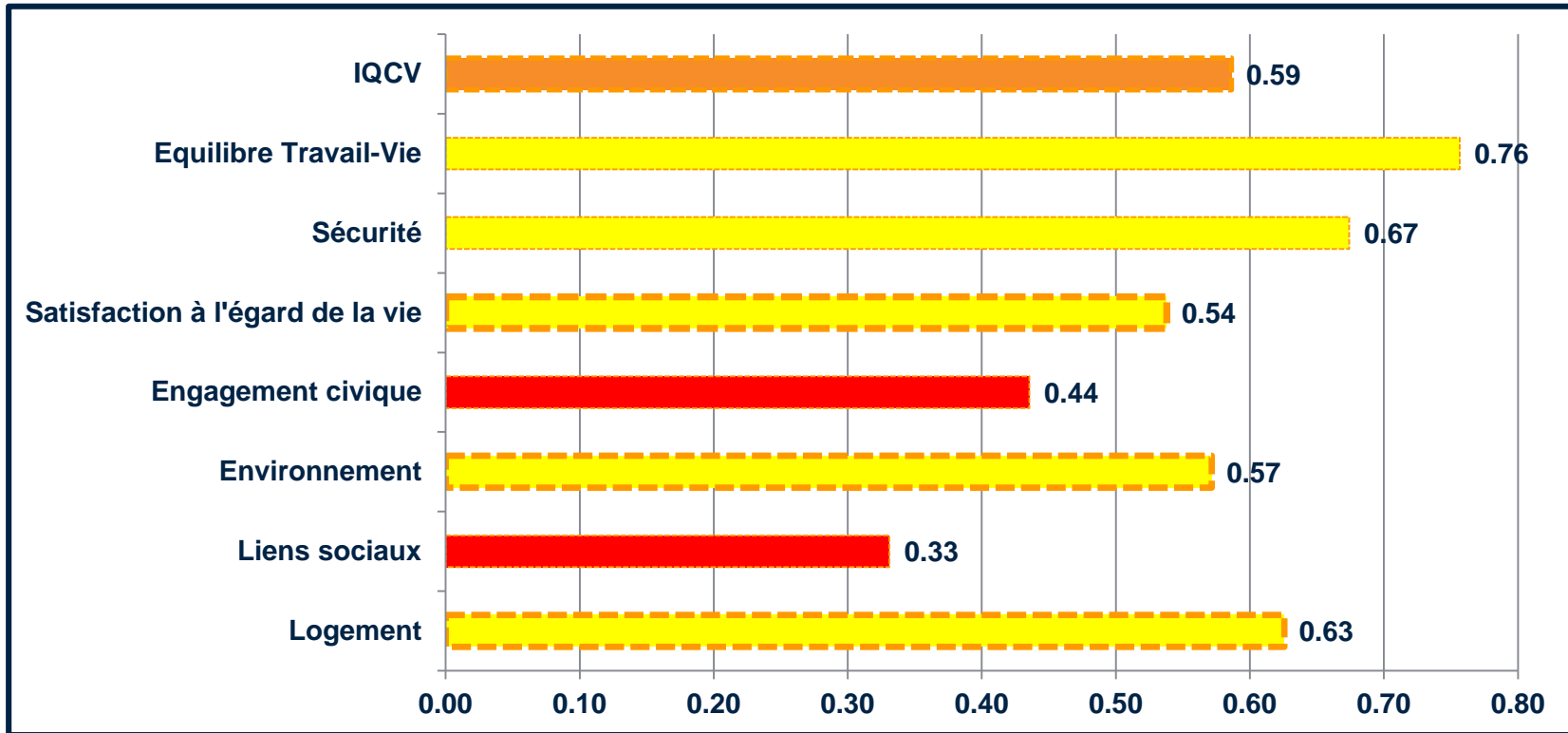
The IQCV calculation requires a weighting of each dimension. On a scale of 1 to 5, a score is assigned to each dimension to take into account its degree of importance in the quality of life.

Thus, housing and safety are rated at 4, a weighting of $4/24 = 0.17$ of the living environment index for these dimensions. A score of 3 is assigned to each of the other dimensions (social networks, civic engagement, civic satisfaction, job satisfaction and work-life balance), corresponding to a weight of $3/24 = 0.13$.

The IQCV is obtained by averaging the scores of the 7 standardized dimension indices

DIMENSION II: QUALITY OF LIVING ENVIRONMENT

Estimation results



The IQCV has a value of **0.586**



an average level of the quality of living environment in Côte d'Ivoire

DIMENSION III: POVERTY TRANSITIONS

Definition:

Measures the different transitions into and out of poverty

Measuring indicator:

Poverty Exiting Synthetic Index (ISSP)

CALCULATION METHOD

ISSP is the ratio between the share of households that got out of poverty over the period and the sum of the proportions of households that got out of poverty and households that remained poor over the period. Thus, ISSP can be written as follows:

$$\text{ISSP} = \frac{A_{\text{PNP}}}{A_{\text{PNP}} + A_{\text{NPP}}}$$

PP: indicates households that were poor in 2008 and remained poor in 2015

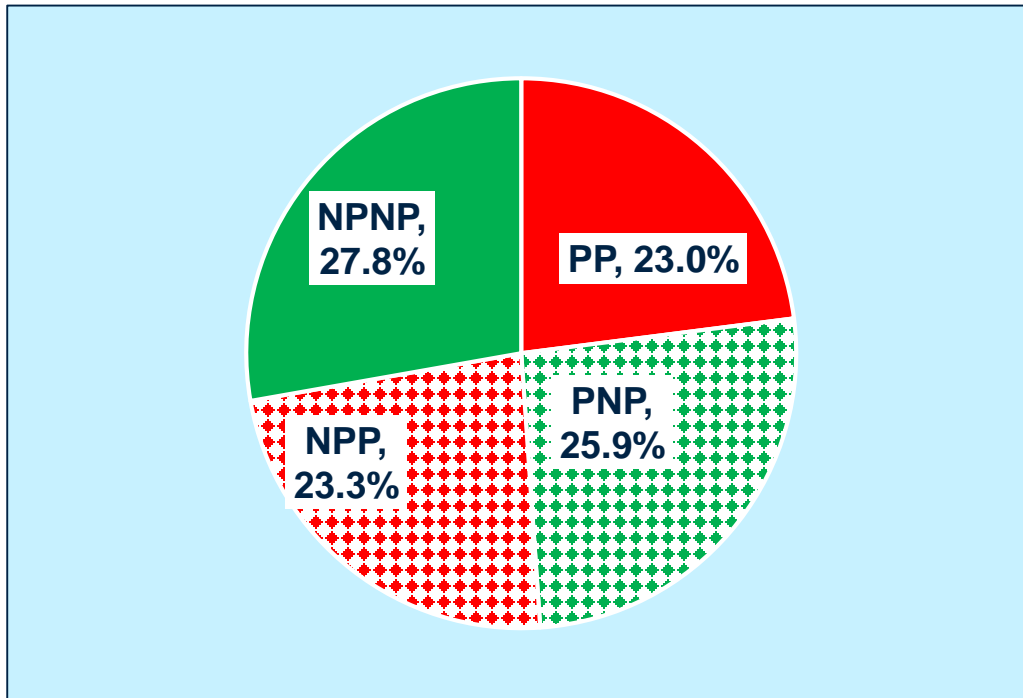
PNP: indicates households that were poor in 2008 and moved out of poverty in 2015

NPP: indicates households that were not poor in 2008 and who moved into poverty in 2015

NPNP : indicates households that were not poor in 2008 and remained so in 2015

DIMENSION III: POVERTY TRANSITIONS

Estimation results



Between 2008 and 2015:

- **23%** of households remained in poverty (chronic poverty)
- **23.3%** of households moved into poverty
- **25.9%** of households moved out of poverty (poverty exiting)
- **27.8%** of households remained non-poor

The ISSP is **52.6%**  among the population in transition, **52.6%** of households who changed poverty status moved out of poverty

DIMENSION IV: EXTENDED HUMAN CAPITAL

Definition:

Human capital encompasses the knowledge, skills, competencies and other qualities of an individual that promote personal, social and economic well-being

Measuring indicator:

Extended Human Development index (IDHE)

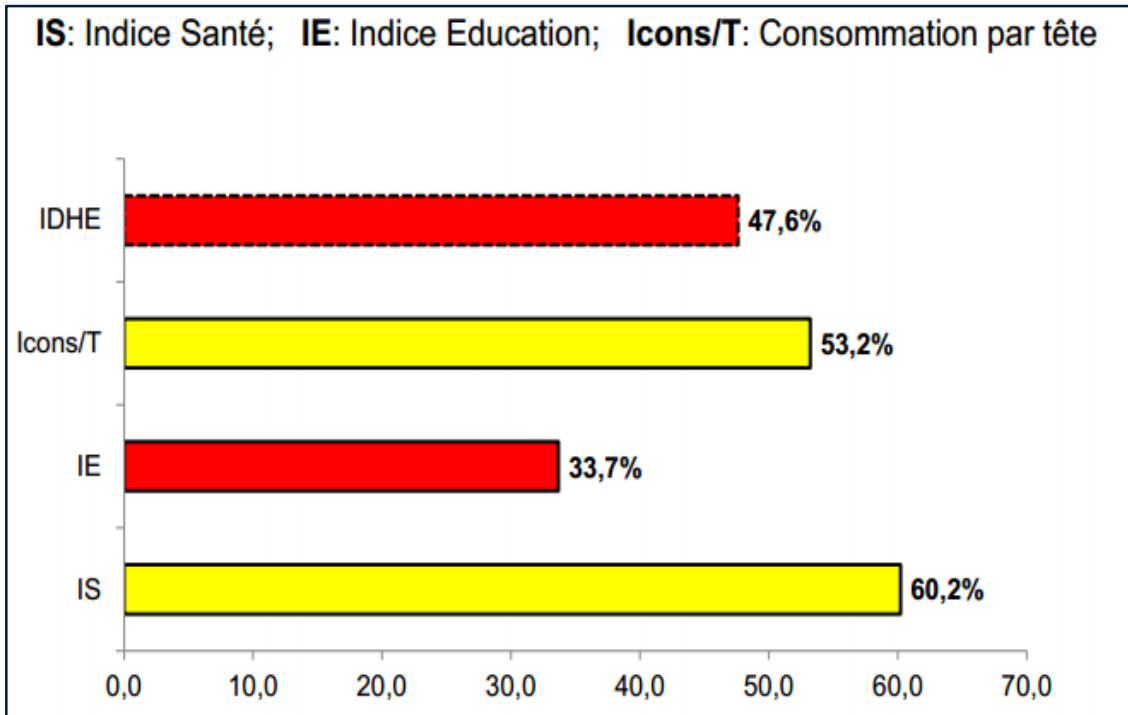
CALCULATION METHOD

The Extended Human Development Index (IDHE) captures the level of human development of a country or region. It is a synthetic indicator constructed from three dimensional indices: (i) Health Index (IS), ii) Education Index (IE) and iii) Per capita consumption (Icon/T). Its value is obtained by calculating the geometric mean of these three indices

Thus,
$$\text{IDHE} = \sqrt[3]{\text{IS} * \text{IE} * \text{Icon}/\text{T}}$$

DIMENSION IV: EXTENDED HUMAN CAPITAL

Estimation results



- Low level of education index (**33.7%**)
- Average level of standard of living index (**53.2%**) and health index (**60.2%**)

DIMENSION V: NETWORKS AND TERRITORIES

Definition:

The level of networks and territory provides information on territorial mobility by describing the attractiveness of areas, human migration, financial flows and goods and services, as well as the distribution of infrastructure in a national territory

Measuring indicator:
Network and Territory Synthetic Index (ISRT)

CALCULATION METHOD

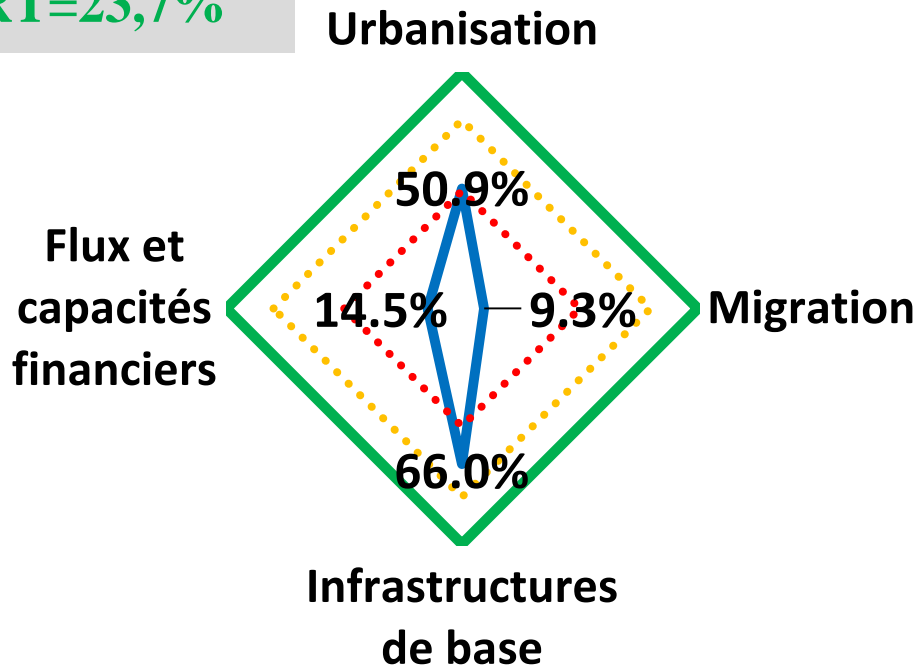
The Network and Territory index is the geometric mean of the four sub-dimensional indicators: (i) Attractiveness, (ii) Urbanization, (iii) Infrastructure and Basic Services and (iv) Transfer Fluidity. Sub-dimensional indicators are themselves the geometric mean of the indices taken into account in the calculation according to a specific approach. The calculation of sub-indicators and ISRT is done according to the process below:

$$ISRT = (\prod_{k=1}^4 I_k)^{\frac{1}{4}}$$
 with **k** the number of sub-dimensions of the **ISRT**.

DIMENSION V: NETWORKS AND TERRITORIES

Estimation results

ISRT=23,7%



- Urbanization is estimated a little above average (50.93%)
- Migration (9.3%) and financial flows and capabilities (14.5%) remain very low
- Basic infrastructure (66.0%) show an improvement

The ISRT has a value 0.237 ➡ a low level in terms of networks and territory

DIMENSION VI: SUMMARY OF DIMENSIONS

Definition:

The progress towards harnessing the Demographic Dividend is captured by the Demographic Dividend Monitoring Index, which is a monitoring and evaluation system grouping together five dimensions

Measuring indicator: **Demographic Dividend Monitoring Index**

CALCULATION METHOD

The Demographic Dividend Monitoring Index (I2S2D) is obtained as a geometric mean of the synthetic indicators of five dimensions and is obtained with the following formula:

$$I2S2D = \sqrt[5]{ICDE * IQCV * ISSP * IDHE * ISRT}$$

With

ICDE: Economic Dependency Coverage index

IQCV: Quality of Living Environment index

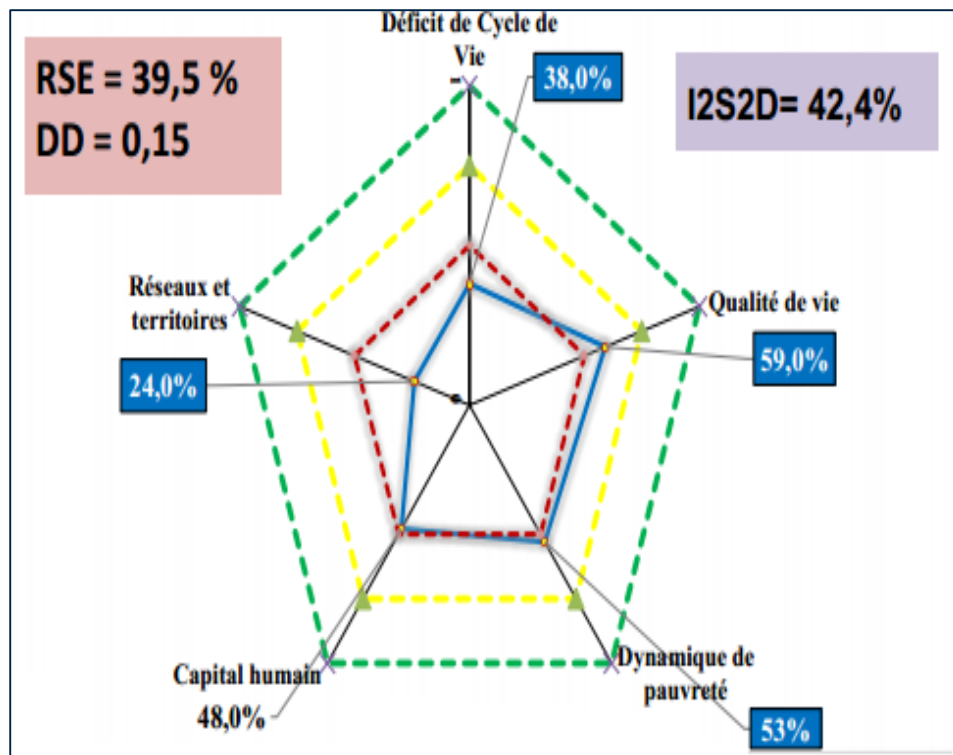
ISSP: Poverty Exiting Synthetic index

IDHE: Extended Human Development index

ISRT: Networks and Territory Synthetic index

DIMENSION VI : SUMMARY OF DIMENSIONS

Estimation results



- Life cycle deficit of **38%** below average (**50%**)
- Average level of quality of life (**59.0%**) in Côte d'Ivoire
- Low value for networks and territories (**24.0%**) pulls the I2S2D down
- Human capital close to average (**48.0%**)
- Poverty transitions, **53%** of the households that were in transition between 2008 and 2015 moved out of poverty

- The I2S2D of Côte d'Ivoire is **42.4%**
- It is below **50%**, meaning that several strategic investments are needed in order to harness a Demographic Dividend

**THANK YOU FOR YOUR
ATTENTION!**

