



Workshop on
**Debt Sustainability for
Central and West Asia**

18-21 November 2024
Urumqi, China

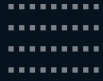


Annual Borrowing Plan

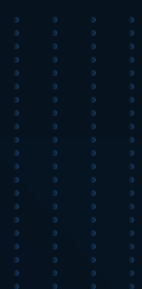
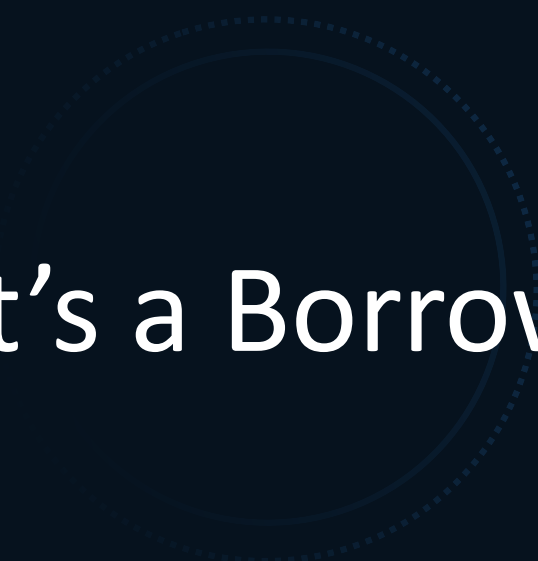
M Coşkun Cangöz

Agenda

- What is a Borrowing Plan?
- Formulating an Annual Borrowing Plan
- Designing an Issuance Plan
- Concluding thoughts



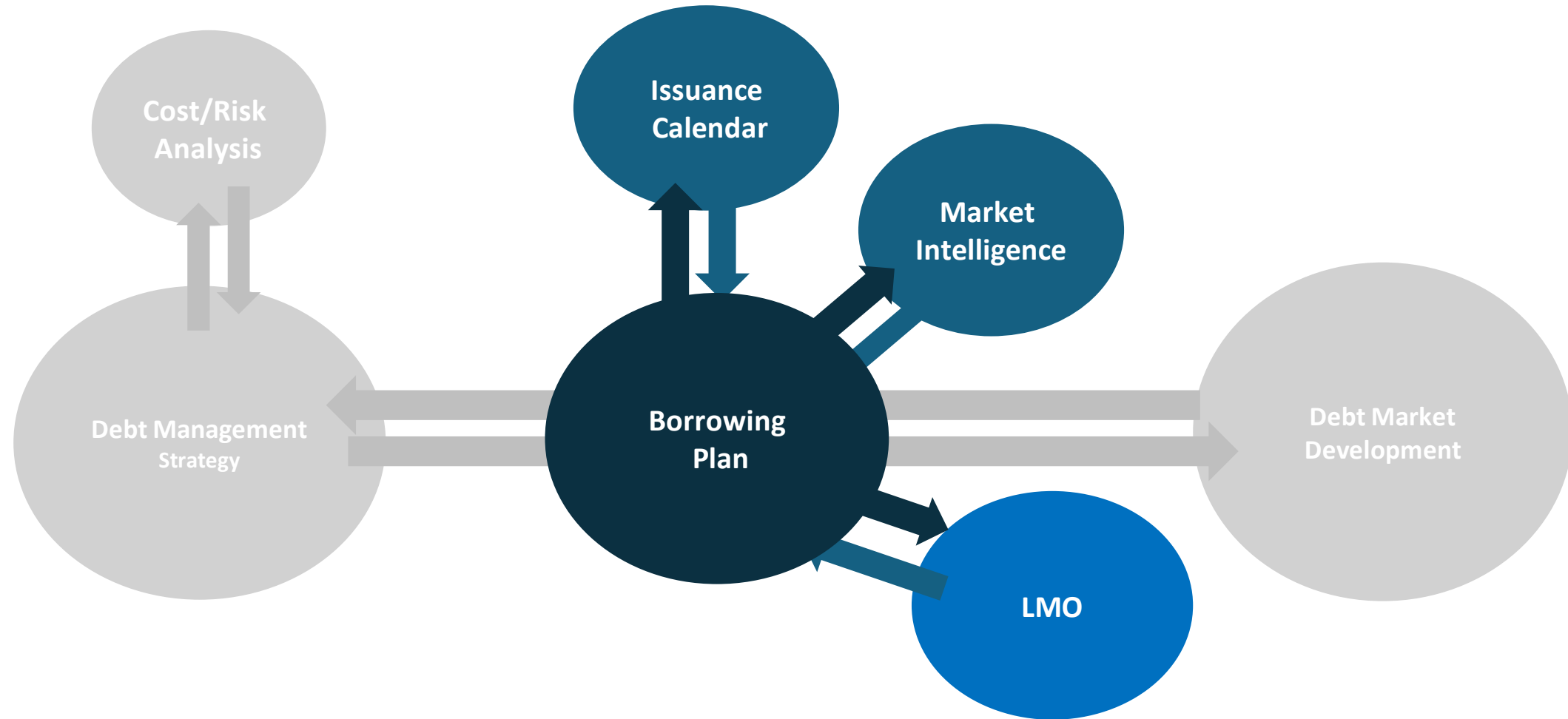
What's a Borrowing Plan



What is an annual borrowing plan?

- Annual borrowing plan is a roadmap designed for reaching the 3-5-year targets determined by the medium-term debt management strategy.
- The plan determines the financing needs and sets out the timing and breakdown of domestic and external borrowing and serves as a guidelines for the issuance calendar.
- In line with the medium-term reference limits, the plan includes cost and risk parameters to guide the evolution of public debt during the program period.
- Annual borrowing plan improves transparency and predictability and is key for market development.

Borrowing Plan is the main tool for the implementation of debt management strategy



A borrowing plan is a high-level summary of government financing, as in Uruguay...

Central Government's Financing Needs and Funding Sources
(annual, in USD million)

	2021 (*)	2022 (*)
FINANCING NEEDS	4,964	3,691
Primary Deficit ^{1/}	1,264	247
Interest Payments ^{2/}	1,492	1,573
Amortizations of Bonds and Loans ^{3/}	2,142	1,851
Change in Financial Assets	66	21
FUNDING SOURCES	4,964	3,691
Disbursements from Multilaterals and Fin. Instit.	600	350
Total Issuance of Market Debt ^{4/}	4,317	3,230
Others (net) ^{5/}	47	111
Memo Item : Government Net Indebtedness (GNI)	2,709	1,708

Notes:

(*) Projection. The sum of the components may differ from the totals due to rounding.

1/ Excludes extraordinary transfers to the public Social Security Trust Fund (SSTF).

2/ Includes interest payments to the SSTF on its holdings of Central Government debt.

3/ For 2021, includes the obligations coming due on a contractual basis and bonds repurchased and early redeemed through October 29th, 2021.

4/ Includes bonds issued domestically and in international markets.

5/ Includes exchange rate and market price valuation effects.

Source: Ministry of Economy and Finance.

... or can be
in more
detailed, as
in the UK...

	2019-20	2020-21
CGNCR (ex NRAM, B&B and NR)²	43.1	65.3
Gilt redemptions	98.9	97.6
Redemption of the sovereign Sukuk	0.2	N/A
Planned financing for the Official Reserves	6.0	0.0
Financing adjustment carried forward from previous financial years	4.0	-0.8
Gross financing requirement	152.2	162.1
<i>less:</i>		
NS&I net financing	10.1	6.0
Other financing ³	0.0	0.0
Net financing requirement (NFR) for the Debt Management Office (DMO)	142.1	156.1
DMO's NFR will be financed through:		
Gilt sales, through sales of:		
Short conventional gilts	42.8	51.0
Medium conventional gilts	34.0	34.2
Long conventional gilts	36.9	42.3
Index-linked gilts	23.1	20.6
Unallocated amount of gilts	0.0	8.0
Total gilt sales for debt financing	136.9	156.1
Total net contribution of Treasury bills for debt financing	6.0	0.0
Total financing	142.9	156.1
DMO net cash position	1.3	0.5

... with long-term projections.

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
CGNCR (ex NRAM, B&B and NR) ²	43.1	65.3	73.0	69.9	64.0	72.6
Redemptions ³	99.1	97.6	79.3	73.3	71.8	90.6
Official Financing for the Reserves	6.0	0.0	0.0	0.0	0.0	0.0
Financing adjustment carried forward from previous years	4.0	-0.8	0.0	0.0	0.0	0.0
Illustrative gross financing requirement	152.2	162.1	152.4	143.2	135.7	163.2

Also, there
are cases, as
in Armenia...

<i>Financing sources, AMD billion</i>	2022 (State Budget)
Total deficit	236.3
including:	
Domestic sources	272.2
of which:	
Net borrowings	250.2
Proceeds from allocation of treasury bonds	420.2
Treasury bonds redemption/buyback	(170.0)
Redemption of promissory notes	(0.02)
Net financial assets	22.0
Provision of loans and borrowings (net)	(38.5)
Free residue of 2022 State Budget at the beginning of the year	-
Use of the stabilization deposit account	60.5
Other	-
External sources	(36.0)
of which:	
Net borrowings	108.5
Receipt of loans and borrowings	230.0
project loans	134.5
budget support loans	95.5
Redemption of the received loans and borrowings	(121.5)
Proceeds from allocation of Eurobond	-
Eurobond redemption/buyback	-
Net financial assets	(144.5)
Provision of loans and borrowings (net)	(143.6)
Acquisition of stocks and other participation in equity	(0.9)

... an issuance plan is included.

Treasury bonds auctions calendar

January 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
1						1	2
2	3	4	5	6	7	8	9
3	10	11	12	13	14	15	16
4	17	18	19	20	21	22	23
5	24	25	26	27	28	29	30
6	31						

February 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
6		1	2	3	4	5	6
7	7	8	9	10	11	12	13
8	14	15	16	17	18	19	20
9	21	22	23	24	25	26	27
10	28						

March 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
10		1	2	3	4	5	6
11	7	8	9	10	11	12	13
12	14	15	16	17	18	19	20
13	21	22	23	24	25	26	27
14	28	29	30	31			

April 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
14					1	2	3
15	4	5	6	7	8	9	10
16	11	12	13	14	15	16	17
17	18	19	20	21	22	23	24
18	25	26	27	28	29	30	

May 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
18							1
19	2	3	4	5	6	7	8
20	9	10	11	12	13	14	15
21	16	17	18	19	20	21	22
22	23	24	25	26	27	28	29
23	30	31					

June 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
23			1	2	3	4	5
24	6	7	8	9	10	11	12
25	13	14	15	16	17	18	19
26	20	21	22	23	24	25	26
27	27	28	29	30			

July 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
27					1	2	3
28	4	5	6	7	8	9	10
29	11	12	13	14	15	16	17
30	18	19	20	21	22	23	24
31	25	26	27	28	29	30	31


August 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
32	1	2	3	4	5	6	7
33	8	9	10	11	12	13	14
34	15	16	17	18	19	20	21
35	22	23	24	25	26	27	28
36	29	30	31				

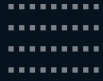
September 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
36				1	2	3	4
37	5	6	7	8	9	10	11
38	12	13	14	15	16	17	18
39	19	20	21	22	23	24	25
40	26	27	28	29	30		

October 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
40						1	2
41	3	4	5	6	7	8	9
42	10	11	12	13	14	15	16
43	17	18	19	20	21	22	23
44	24	25	26	27	28	29	30
45	31						

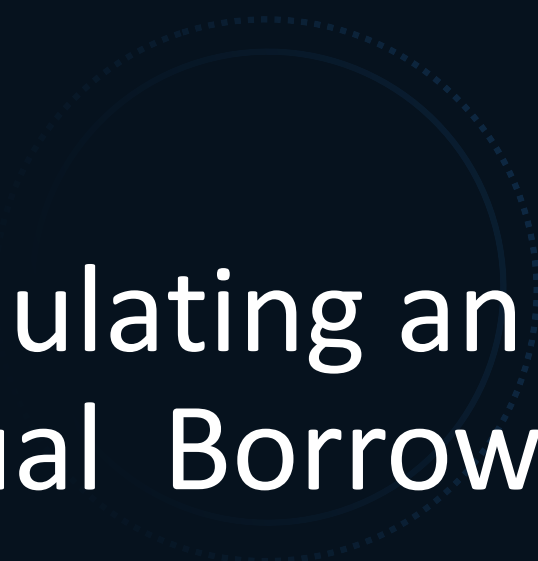
November 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
45		1	2	3	4	5	6
46	7	8	9	10	11	12	13
47	14	15	16	17	18	19	20
48	21	22	23	24	25	26	27
49	28	29	30				

December 2022							
Week	MON	TUE	WED	THU	FRI	SAT	SUN
49				1	2	3	4
50	5	6	7	8	9	10	11
51	12	13	14	15	16	17	18
52	19	20	21	22	23	24	25
53	26	27	28	29	30	31	


 Short-term
 Medium-term
 Long-term



Formulating an Annual Borrowing Plan



Main Elements of a Borrowing Plan

Component 1: Financing Need

I - Cash Based Primary Balance

II - Interest Payments

Domestic

External

III - Cash Based Balance (I - II)

IV - Advances

V - Deferred Payments

VI - Overall Balance (III - IV - V)

VII - Principal Payments

Domestic

External

Financing Need (VI + VII)

Component 2: Financing

Financing (I +II + III + IV + V)

I -External Borrowing

Loans

Securities

II - Net Domestic Borrowing

T-Bills

Bonds

III - Net Lending

Lending

(-) Repayment

IV - Other Receipts

V -Currency and Deposit

Cost and Risk Indicators

Cost Indicators

Exchange Rate

Domestic Debt Av. Int. Rate

External Debt Av.Int. Rate

Risk Indicators

Roll-over ratios

Total

Domestic

External

Refinancing Risk

Average Time to Maturity (ATM)

Debt Maturing in 1 Year

Interest Rate Risk

Average Time to Refixing (ATR)

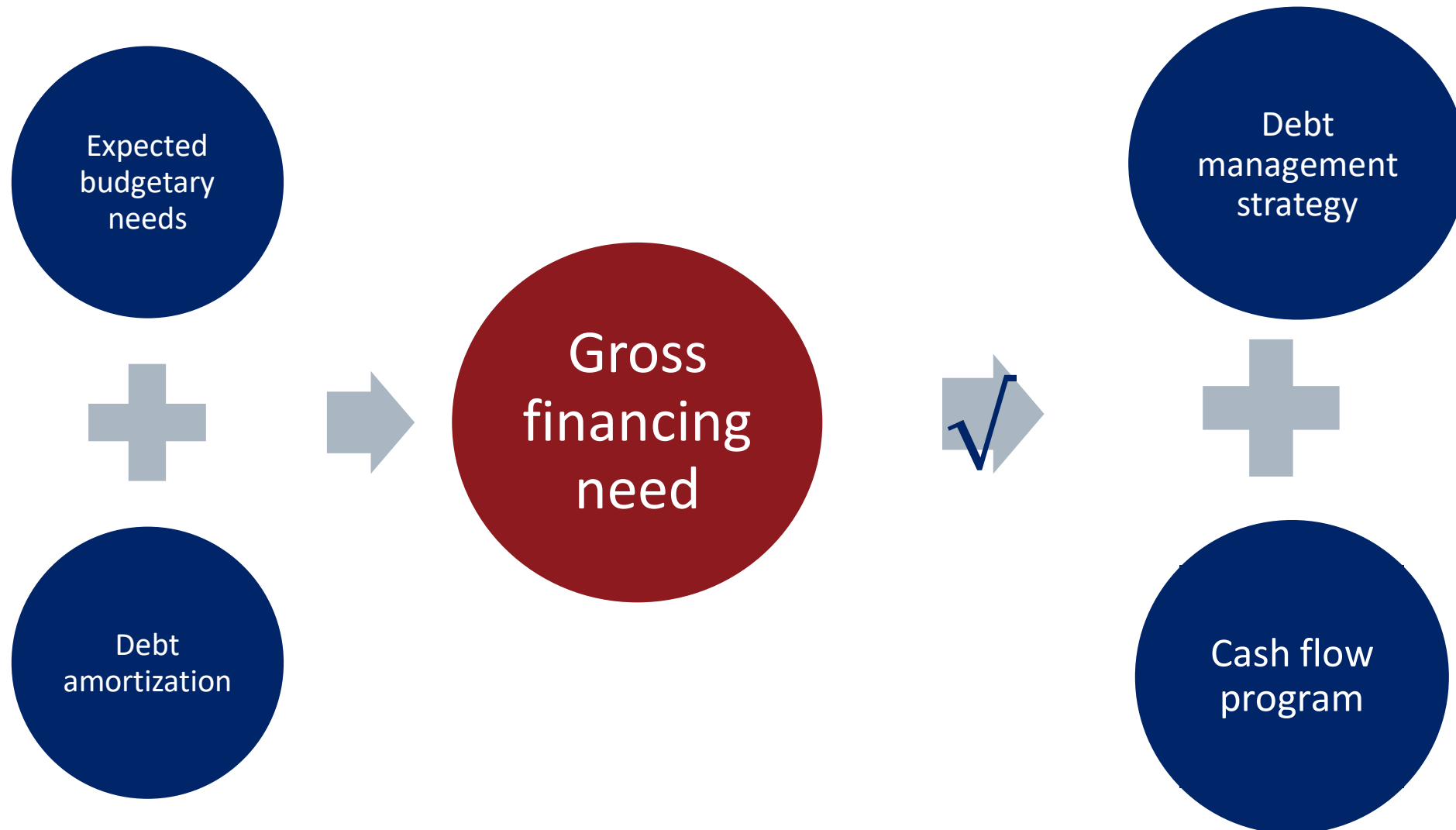
Debt Refixing in 1 Year

Floating Rate Debt (% of total debt)

FX Risk

FX Debt (% of total debt)

Component 1: Financing Need



Component 1: Financing need

- The annual borrowing program ensures that short-term financing needs and government payment obligations are fully met.
- Annual borrowing program needs to be consistent with cash flow projections as it provides reliable high-frequency data:
 - primary deficit
 - advances & deferred payments
 - net lending
 - cash balance

Fiscal vs. Cash-based Financing Need

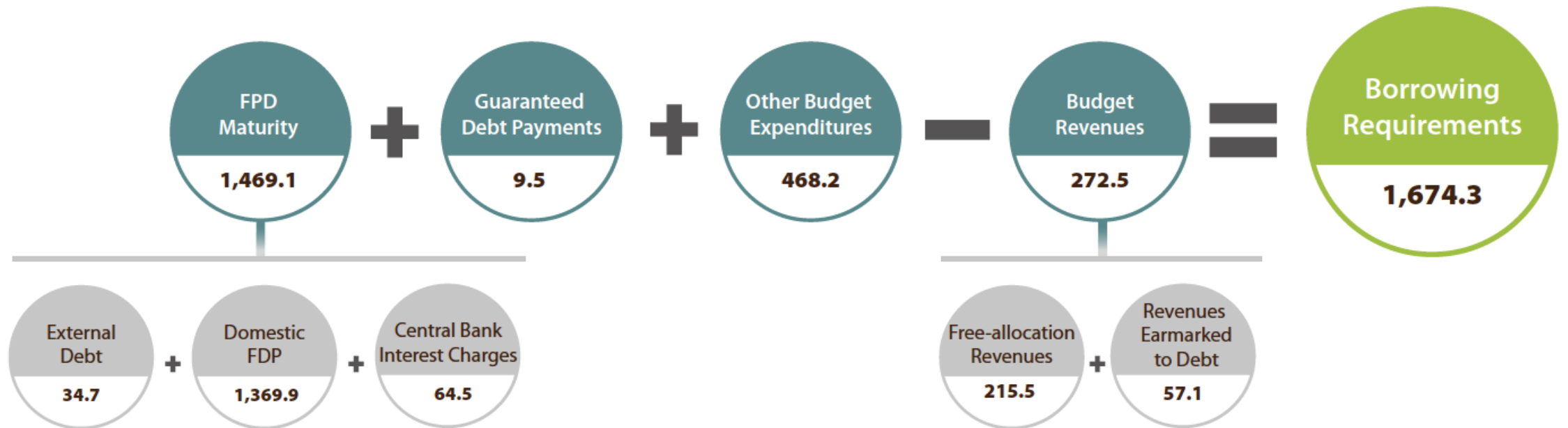
Primary Budget Deficit

+ Interest Payments
= Fiscal (Budget) Deficit
+ Redemptions on debt
= **Funding need**

Cash Based Primary Deficit

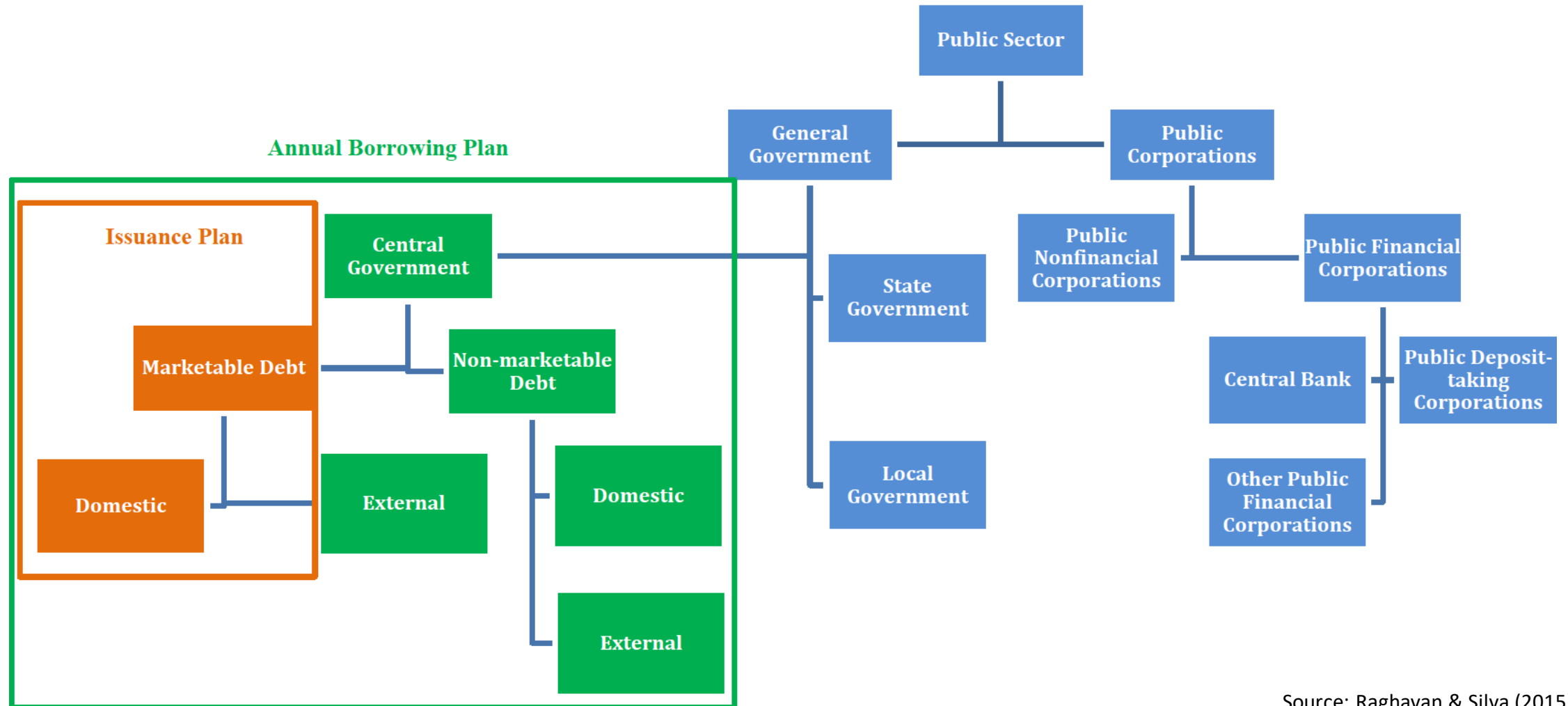
+ Interest Payments
+ Advances and Deferred
Payments
= **Cash Based** Deficit
+ Redemptions on debt
+/- Net lending
+/- Cash and deposit
= **Cash Funding need**

Financing Need: Brazil

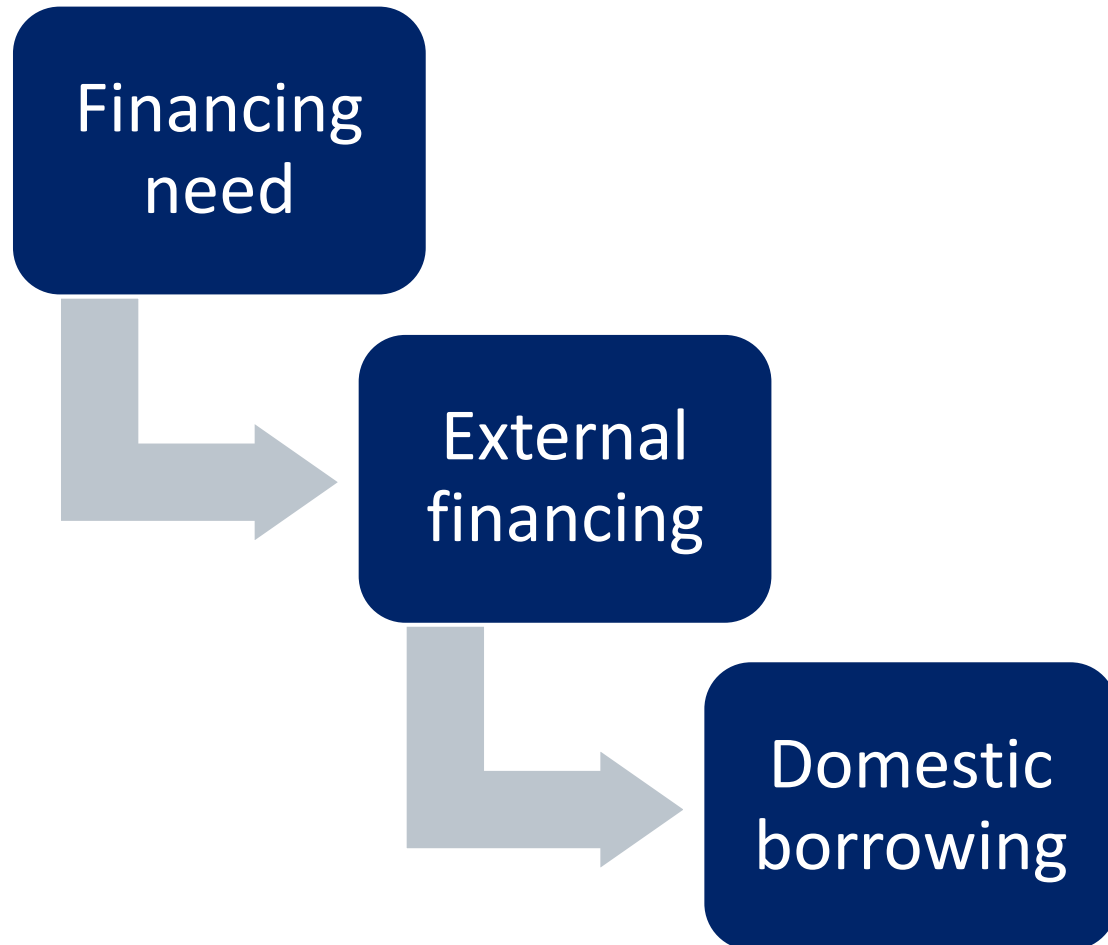


The Treasury has the flexibility to raise funds through issuances throughout the year, equal, greater, or less than borrowing requirements, depending on market conditions.

Component 2: Financing

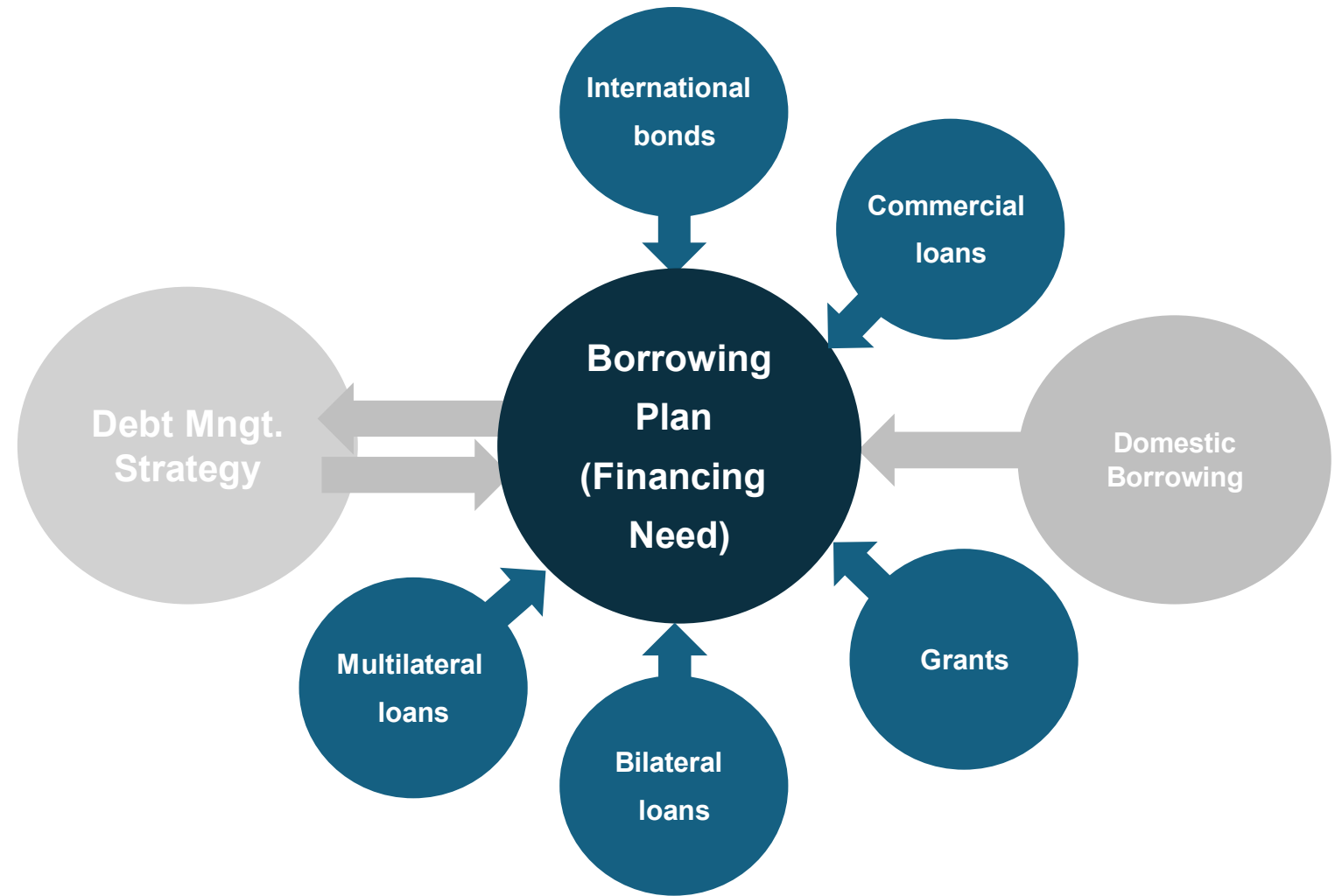


Component 2: Financing



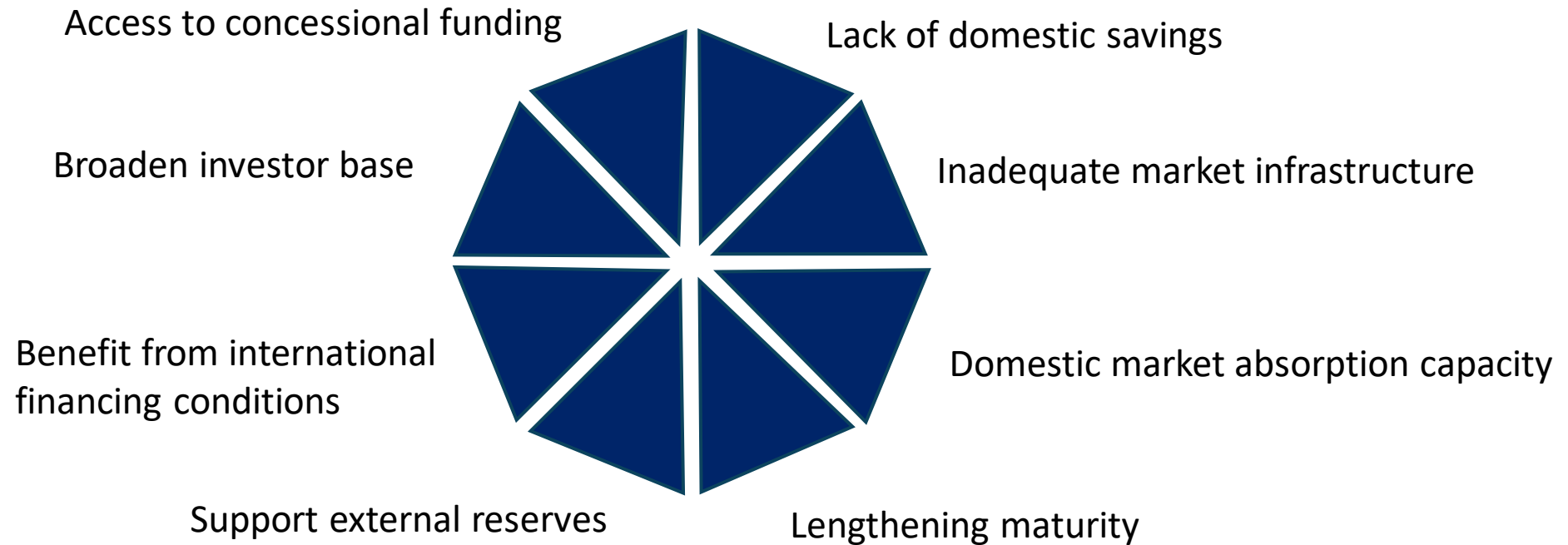
In many cases, debt managers first program the amount and composition of external financing, as they have more flexibility on domestic borrowing

External Financing



Cash inflows and cash outflows may differ based on the characteristics of external financing.

External Financing

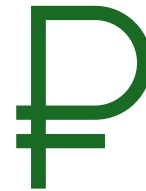


External Financing

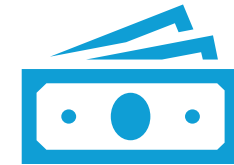
- Traditionally, developing countries primarily borrow from multilateral and bilateral external lenders
- Many countries issued sovereign bonds in the international markets over the last two decades.



The terms and conditions of the loans need to be subject to financial analysis that goes beyond concessionality analysis



The aim is to obtain the lowest possible borrowing costs, including grants and technical assistance, within the guidelines of the ABP (in line with the DMS) in terms of currency, maturity, and fixed or floating rate composition



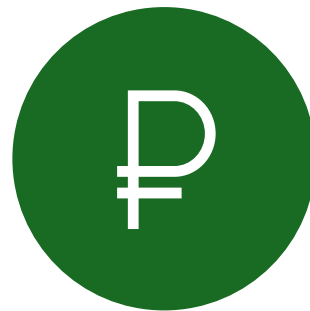
The financial analysis should include
interest rates (including fees)
currency
concessionality
penalty fees and other charges
the disbursement and maturity profile
impact on the existing debt service profile

Domestic Financing

Domestic debt instruments, with different cash flows, provide flexibility in the adjustment of debt profile.



ZERO-COUPON SECURITIES ARE ISSUED AT A DISCOUNT BUT REDEEMED ON MATURITY AT FACE VALUE.



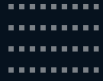
COUPON SECURITIES ISSUED AT A DISCOUNT, PAR OR PREMIUM, AND PAY ANNUAL, SEMI-ANNUAL OR QUARTERLY INTEREST AT ITS PAR VALUE. REDEMPTION IS ON MATURITY.



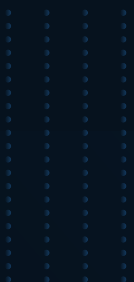
LOANS MAY BE DISBURSED PARTIALLY OR FULLY. PAYMENTS GENERALLY INCLUDE A PORTION OF OUTSTANDING PRINCIPAL AND INTEREST.



BANK OVERDRAFT IS PARTIALLY UTILIZED IN MOST CASES AND MAY BE REPAYED FULLY IN A CALENDAR YEAR OR ROLLED-OVER.



Designing an Issuance Plan



DeMPA - DPI 8.1 Domestic Borrowing

- Governments can reduce their long-term domestic borrowing costs by being transparent and predictable in their securities issuance operations
- This involves preparing the market for the issuance of wholesale instruments by publishing a borrowing calendar in advance (excluding T-bills issued for monetary policy purposes)
- To remain credible, the government needs to issue securities in accordance with the calendar, other than in extreme circumstances and accompanied by an explanation
- At a minimum, the calendar should specify issue dates and instruments for the following month, be published at least one week ahead of the start of that month, and it should be followed

DeMPA - DPI 8.1 Domestic Borrowing

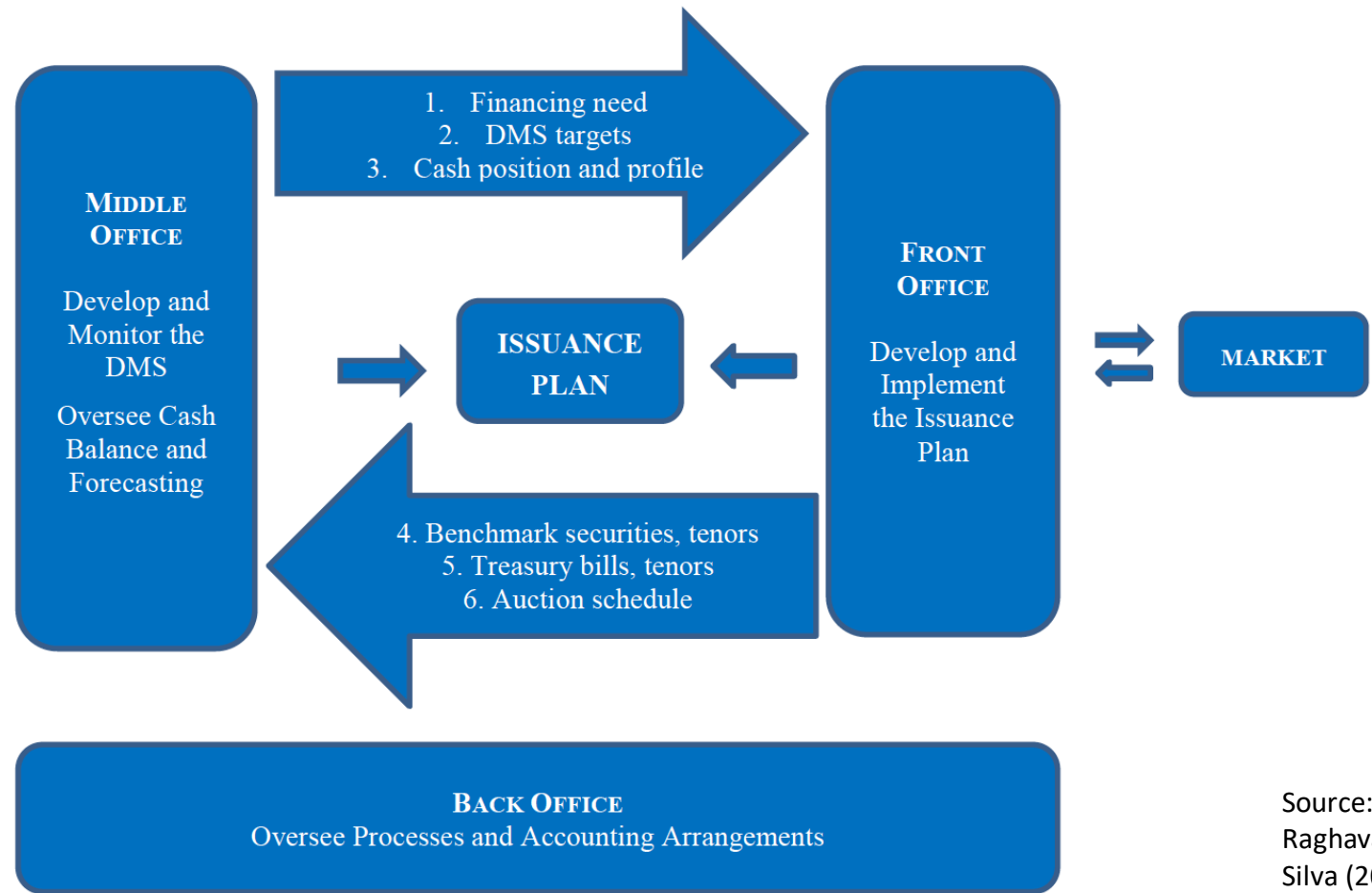
Sound practices:

- A monthly issuance calendar (with auction dates and instrument type) is published before the beginning of the respective month, often with indicative amounts to issue, with the determined amounts to issue for each type of instrument published at least 1 day before the auction date.

Higher Standards

- A quarterly issuance calendar (with auction dates and instrument type, and often with indicative amounts) is published before the beginning of the respective quarter, and auctioned amounts for each type of instrument are published at least 1 day before the auction date.
- Yearly issuance calendar (with auction dates and indicative total issuance amounts)

Issuance Plan



Source:
Raghavan &
Silva (2015)

An issuance plan covers only the following:

- domestic debt
- marketable instruments

Developed for at least one year and updated on a rolling basis.

Steps in developing an Issuance Plan



1 - Determine financing need to be met by GS issuance in the domestic market



2 - Select instruments



3 - Organize auctions



4 - Organize maturities



5- Plan liability management



6 - Develop auction schedule



7- Determine frequency, format, and detail of market communication

1 - Determine the size of domestic funding

Determine the proportion of the government's borrowing requirement to be funded in the domestic government securities market, parallel to the medium-term targets.

Cash flow projections are needed, at least, monthly for the next 12 months, and weekly for the next three months.

Consider

- Domestic market's absorption capacity
- Liquidity conditions
- Enabling external factors

To Do: Coordination with cash management

Historical analysis of market demand and liquidity

Consultations with the market participants and the Central Bank

2 - Instrument Selection

**Consider cost and risk benchmarks (ATM, ATR etc.),
investor preferences, and capital markets**

Determine the instrument types, tenors, the target size (or volume outstanding) of each line, and the number of lines of each tenor to be issued



Manage Tradeoffs

Competing objectives



Diversify Portfolio

Cost factors



Attract Investors

Different instrument



**Promote Market
Activity**

Secondary market

2 - Instrument selection: Instrument mix

Mix of instruments should reflect the cost and risk tradeoff and the coupon and currency preferences of the instruments

To do:

- Diversify portfolio
- Reduce fragmentation
- Broaden investor base

Instrument type	Some advantages	Some disadvantages
Treasury bill	<ul style="list-style-type: none"> • regular issuance to anchor the short end of the yield curve • flexible instrument for liquidity and cash management - needs to be rolled over more frequently 	<ul style="list-style-type: none"> • needs to be rolled over more frequently
Fixed-rate bond	<ul style="list-style-type: none"> • reduce interest rate risk for issuer • plain vanilla instrument that is easy to value and trade 	<ul style="list-style-type: none"> • typically more expensive than floating-rate bond at longer tenors
Floating-rate bond	<ul style="list-style-type: none"> • can help lengthen portfolio ATM • can help diversify investor base 	<ul style="list-style-type: none"> • increase interest rate risk for issuer
FX-bond	<ul style="list-style-type: none"> • can help diversify investor base 	<ul style="list-style-type: none"> • increase currency risk for issuer
Bullet maturity bond	<ul style="list-style-type: none"> • plain vanilla instrument that is easy to value and trade 	<ul style="list-style-type: none"> • refinancing risk over short period
Amortizing bond	<ul style="list-style-type: none"> • principal can be repaid over a longer period 	<ul style="list-style-type: none"> • more difficult to value and trade

2 - Instrument selection: Tenor

The tenor of the debt instruments determine not only the portfolio ATM but also the cost of borrowing, while it is influenced by the investor's preferences.

To do:

- Standardize tenor of the benchmark securities (e.g., 1y, 3y, 5y and 10y).
- Keep the intervals between the tenors of benchmark securities wide enough to avoid distorting the demand, but also close enough to provide price reference to the points in between two benchmarks
- Lengthen the tenor of benchmark bonds gradually by adding a new security close to the long-end of the yield curve.

2 - Instrument selection: Target size

Target size should be determined in line with debt manager's ability to manage refinancing risk which includes the availability of liquidity buffer and/or execution of liability management operations. Providing liquidity in the secondary market is an objective in many countries.

To do:

- Consider the outstanding volume likely to be held in trading portfolio vs. held-to-maturity portfolio
- Analyze the constraints of target investor groups
- Consider minimum size/liquidity requirements of benchmark indices
- Leave space for reopening(s)

2 - Instrument selection: Benchmark Issues

Market consultation before building a benchmark strategy is necessary as the market determines which security attains benchmark status.

A security is likely to become a market benchmark if

- There is demand for that security
- The coupon is competitively set reflecting market rates
- The target size is reached quickly before the coupon goes off-market

To do:

- Align the launch with the redemption of existing benchmarks
- Make sure that market demand for benchmark is not distorted by similar securities
- Support pricing of longer tenors with the sequencing of benchmarks
- Use liability management to support regularity and pace of issuance and reopenings

3 - Organize Auctions

Determine the auction amount of issuance and reopenings, frequency, and the sequencing of securities.

Market consultation (e.g. the demand, planning of the timing of issuances of different instrument) is needed.

Consider

- The tradeoff between auction size and frequency
- The domestic market's absorption capacity
- Availability of tools to manage refinancing risk
- Alternative issuance methods

To Do:

Offer enough amount to promote competitive price formation.
Set the pace of issuance and sequencing of the instruments
Consider LMO and cash management operations

4 - Organize Maturities

Organize the redemption dates of securities to reduce volatility of cash flows and refinancing risk coming from benchmark building

Consider the liquidity position of the budget (cash flow and cash balance), target size of issues, and tenors.



Choose redemption date

First issuance and re-openings



Avoid distorting demand

Sequencing of benchmarks



Align redemptions

Expected settlement dates of future auctions

5 – Plan liability management

Determine the securities and timing of liability management and interaction with regular funding activities.

Alignment with cost-risk indicators is essential as liability management help mitigate refinancing risk.

Consider

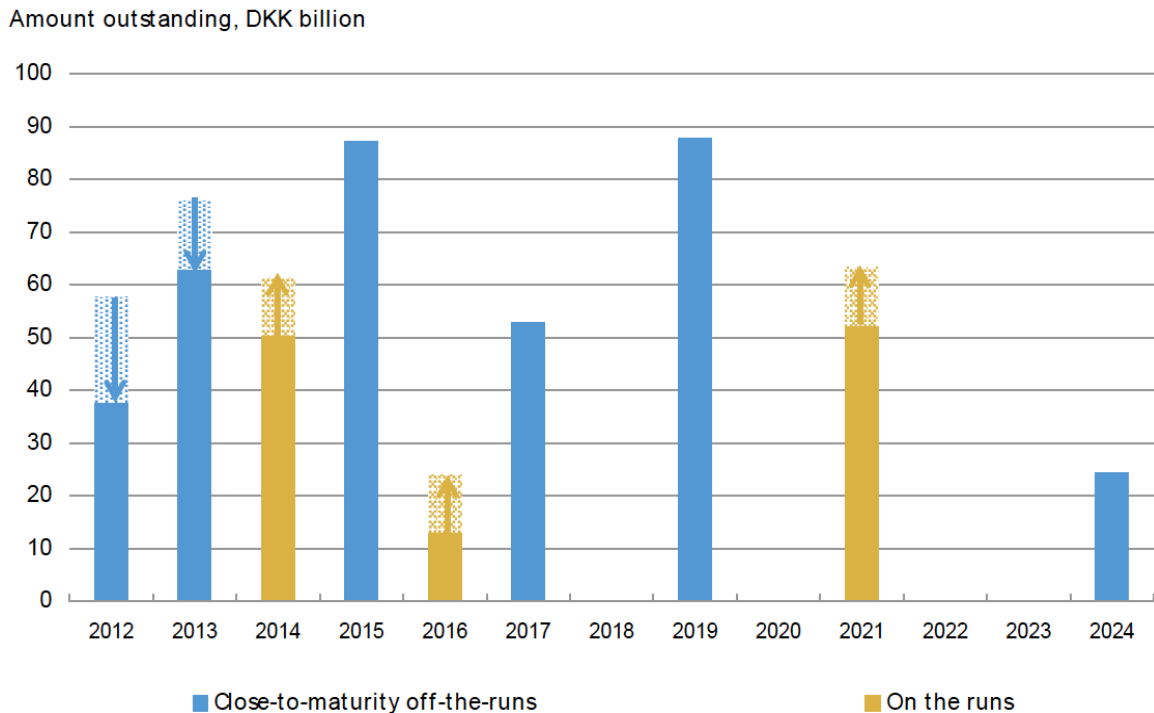
- Availability of securities eligible for liability management
- Infrastructure and staff capacity
- Treasury's cash position
- Market appetite / conditions

To Do: Collect information on the timing of liability management operation.
Incorporate the transaction into the issuance plan.
Coordinate with cash management

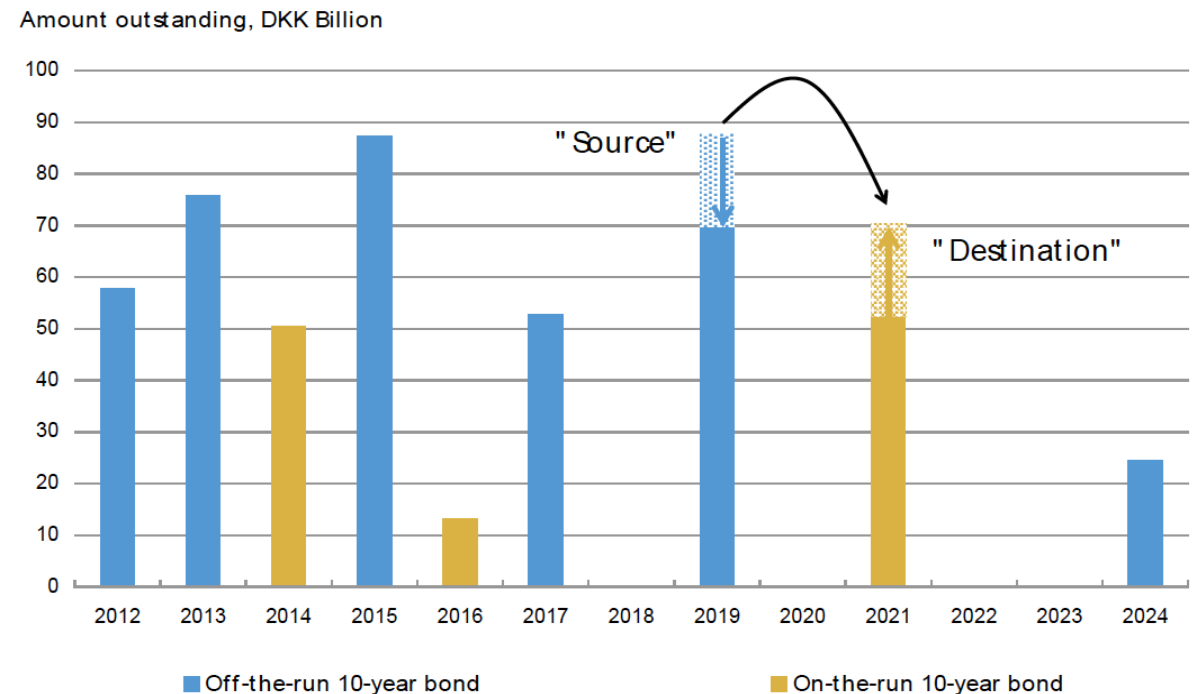
5 – Plan liability management

Reducing refinancing risk and lowering the funding cost through issuance of the on-the-run securities and early redemption.

Buybacks combined with increased on-the-run issuance



Bond exchange



6 – Develop an auction calendar

Produce an issuance schedule for domestic securities

Consider portfolio targets of debt management strategy, infrastructure and technical capacity, and market conditions.



Simulate different schedules

First issuance and re-openings



Align redemption

Expected settlement dates of future auctions



Schedule for one year or more

Revisions based on available and new information

7 – Market communication

Determine frequency, format and details of market communication to improve transparency and predictability.

Auction calendar, annual borrowing plan, regular debt management reports, published debt management strategy are the key documents in communication with the market.

Consider

- Primary dealer system
- Information asymmetry
- Central Bank's communication

To Do: Chose amount and timing of information - Choose dissemination channels - Consultation with the PDs - Monitor the impact

Debt and risk indicators: Brazil

Statistics	2020	Reference limits for 2021	
		Minimum	Maximum
Outstanding debt (BRL billion)			
FPD	5,009.6	5,600.0	5,900.0
Composition (%)			
Fixed-rate	34.8	38.0	42.0
Inflation-linked	25.3	24.0	28.0
Floating-rate	34.8	28.0	32.0
FX	5.1	3.0	7.0
Maturity structure			
% maturing in 12 months	27.6	24.0	29.0
Average maturity (years)	3.6	3.2	3.6

Reference limits

Indicadores	Long-term limits	
	Reference	Range
Composition - %		
Fixed-rate	40.0	+/- 2.0
Inflation-linked	35.0	+/- 2.0
Floating-rate	20.0	+/- 2.0
FX	5.0	+/- 2.0
Maturity structure		
% maturing in 12 months	20.0	+/- 2.0
Average maturity (years)	5.5	+/- 0.5

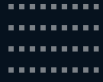
Optimal FPD long-term composition

The National Treasury publishes, the bond-issuance schedule on its website, 15 days before the beginning of each quarter.

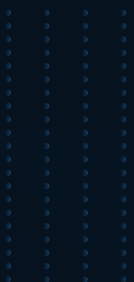
The change in the frequency of the schedule release – annual until 2020, now quarterly – allows the debt manager to promptly adjust the debt strategy to the market scenario, as many uncertainties remain due to the impacts of the pandemic.

Benchmark issuances in the 1st quarter of 2021

Bond	Maturity	1st Quarter	Indexer	Coupon
LTN	6-month	Oct-2021	Fixed Rate	Zero-coupon
	12-month	Apr-2022		
	24-month	Jan-2023		
	48-month	Jul-2024		
NTN-F	6-year	Jan-2027	Fixed Rate	10% per year, payable semiannually
	8-year	Jan-2029		
	10-year	Jan-2031		
LFT	1-year	Mar-2022	Floating Rate	Zero-coupon
	6-year	Mar-2027		
NTN-B	3-year	Aug-2024	Inflation-Linked Rate	6% per year, payable semiannually
	5-year	Aug-2026		
	7-year	Aug-2028		
	10-year	Aug-2030		
	20-year	Aug-2040		
	35-year	May-2055		



Concluding thoughts



Concluding thoughts

- The annual borrowing plan is the main vehicle for implementing the government debt management strategy.
- The plan determines the financing needs, sets out the timing and breakdown of domestic and external borrowing, and serves as a guideline for the issuance calendar.
- Issuance Plan covers only domestic marketable debt to determine the type, timing, tenor, and size of the government securities.
- The selection of the right instruments is the backbone of a well-structured issuance plan which helps mitigate refinancing risk and development of the secondary market.
- Communication with the market is essential not only for obtaining advice on the market structure and understanding the market's preferences but also for transparency and predictability.