

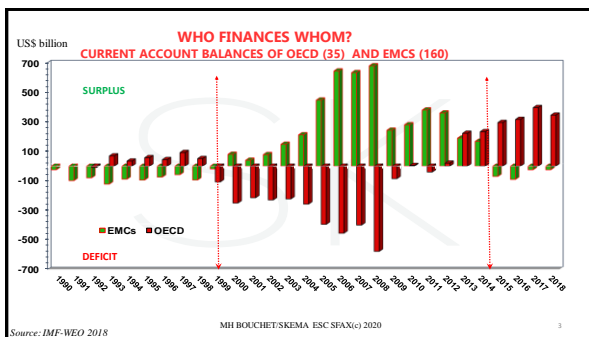

  
**BALANCE DES PAIEMENTS & RISQUE-PAYS**
  
**I**
  
 ESC SFAX 2020
   

  
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[WWW.DEVELOPINGFINANCE.ORG](http://WWW.DEVELOPINGFINANCE.ORG)
  
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**DÉFINIR LES INDICATEURS DE RISQUE MACRO-ÉCONOMIQUE**

1. Déficit des finances publiques/PIB
2. Différentiel de taux d'inflation
3. Déficit des paiements courants/PIB
4. Taux de change réel effectif
5. Indicateurs de liquidité & solvabilité
6. Structure produits/marchés du commerce extérieur
7. Fuite des capitaux

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**LA BALANCE DES PAIEMENTS EST TOUJOURS EN ÉQUILIBRE!**



La balance sera équilibrée par des entrées de capitaux, par la variation des réserves de change de la banque centrale, par des financements exceptionnels du FMI, par des arriérés... ou par un défaut de paiement!

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### LES DÉCLENCHEURS D'UNE CRISE DE LIQUIDITÉ? FLUX BRUTS ET FLUX NETS

- ▶ Flux de capitaux bruts =  $\Sigma$  Flux de capitaux Long-terme + Court-terme
- ▶ Flux nets =  $\Sigma$  Flux bruts - Remboursements
- ▶ Transfers nets =  $\Sigma$  Flux nets - Paiements d'Intérêt
- ▶ Service de la dette total =  $\Sigma$  Remboursements + Intérêts de la dette

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### BALANCE DES PAIEMENTS ET DETTE EXTÉRIÈRE

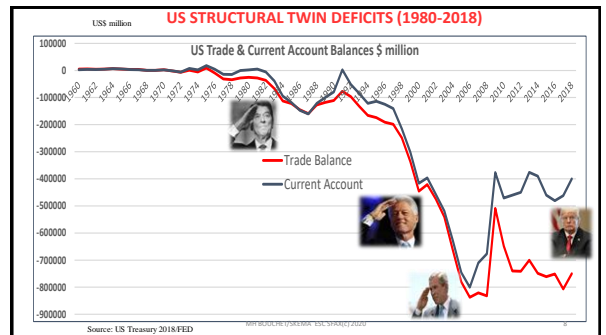
Balance des Paiements	Actif/Passif
<p><b>Change in flows</b></p> <p>Double-entry accounting system</p> <p>▶ Receipts = <b>inflows</b> (exports GS + capital)</p> <p>▶ Debits = <b>Outflows</b> (Imports, interest and debt payments)</p>	<p><b>External Debt and Reserves</b></p> <p>▶ <b>Change in stocks</b></p> <p>Δ+ Reserve Assets Debt repayment</p> <p>Δ- Reserves Δ+ Debt Stock</p>

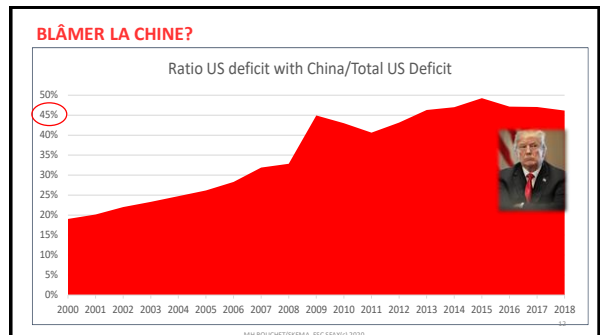
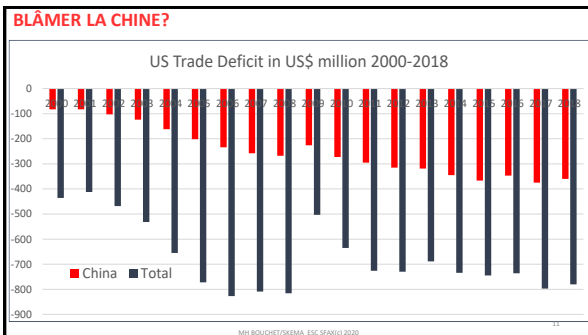
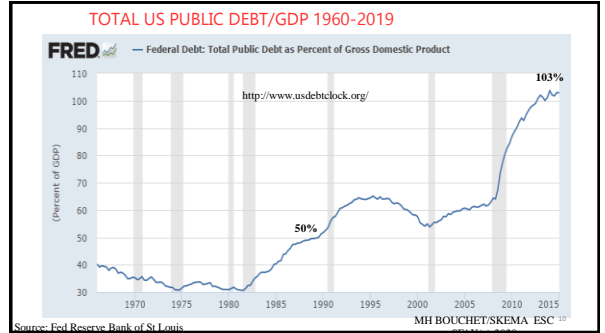
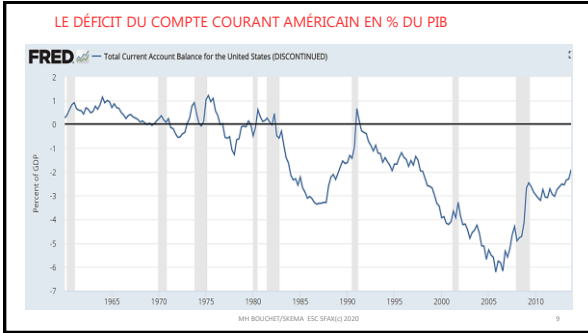
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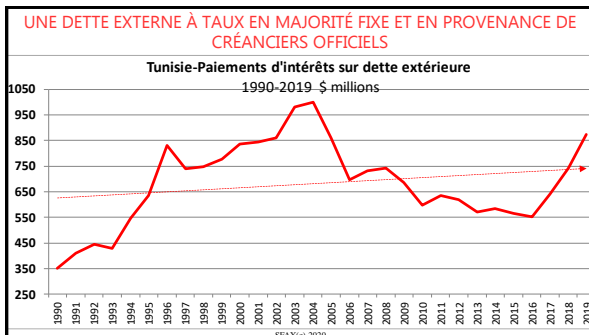
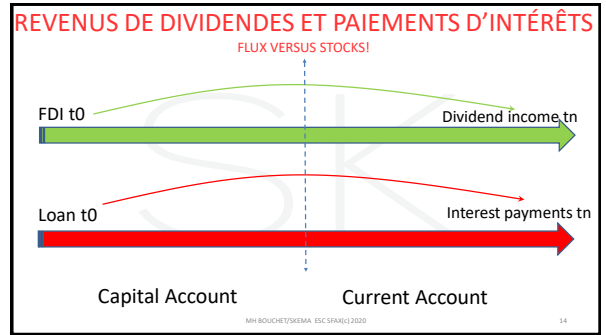
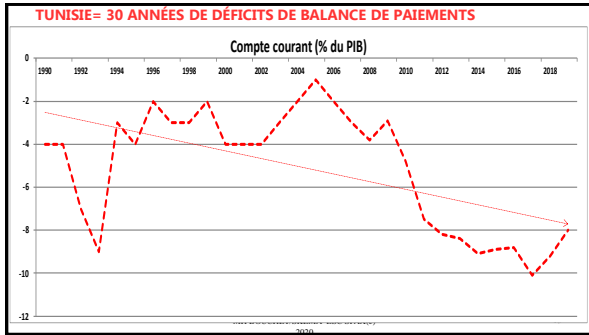
### LE COMPTE COURANT DE LA BALANCE DES PAIEMENTS

<ul style="list-style-type: none"> <li>Exportations de marchandises f.o.b.</li> <li>- Importations f.o.b.</li> <li>= <b>Balance commerciale (S-I)</b></li> <li>+ Revenus de services non financiers (tourisme, shipping)</li> <li>- Paiements de services</li> <li>+ Revenus d'investissement (crédit)</li> <li>- Paiements d'intérêt sur la dette (débit)</li> <li>+ (-) Transferts privés (travailleurs migrants)</li> <li>+ (-) Transferts publics (dons, APD)</li> <li>= <b>Balance courante</b></li> </ul>	<p><i>Des postes les moins liquides vers les plus liquides!</i></p>
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- ### CORRIGER ET RÉDUIRE UN DÉFICIT?
- **Impact of domestic currency devaluation**
- prices should increase for imports
    - foreign exporters may reduce price to maintain market share
  - other currencies may also weaken to stay competitive
    - no net gain from weaker domestic currency
  - international trade contracts create a lag effect
    - 18+ month lag exists in US
  - intra-company trade is resistant to currency fluctuations
    - 50% of all international trade
    - 60% of European exports are intra-European transactions
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**COMMENT RÉDUIRE UN DEFICIT COMMERCIAL?**

- ▶ **Stimuler les Exports?** depends on the price elasticity of foreign demand but also on the supply elasticity of exported products at home
- ▶ **Réduire les Imports?** depends on relative share of “incompressible” imports (foodstuffs, energy resources, capital goods, machinery, any import for re-export...), but also on the price elasticity of domestic demand

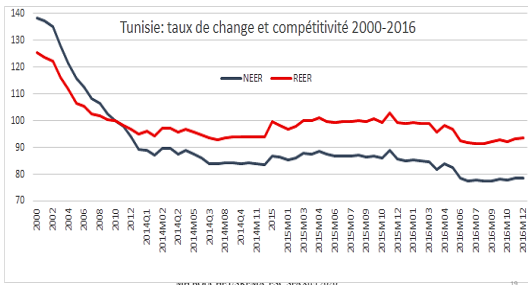
**TAUX NOMINAL ET REEL EFFECTIF?**

- ▶ **Taux de change réel** = Taux de change nominal \* ratio des prix internationaux/domestiques
- ▶ **Taux de change réel effectif** = moyenne pondérée des taux de changes réels avec chacun des principaux partenaires commerciaux

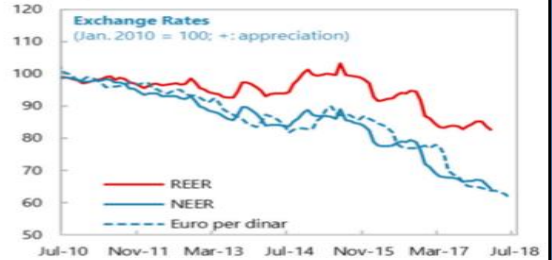
$$REER_{country\ i} = \sum_{j=1}^N \text{trade weight (country j)} \times \text{Real Exchange Rate (country j)}$$

country j=1,2... N are country i's trading partners, exchange rates in natural logarithms (geometric averages)

**TAUX DE CHANGE NOMINAL ET REEL EFFECTIF**



*The dinar depreciated noticeably in nominal and real terms since 2016.*



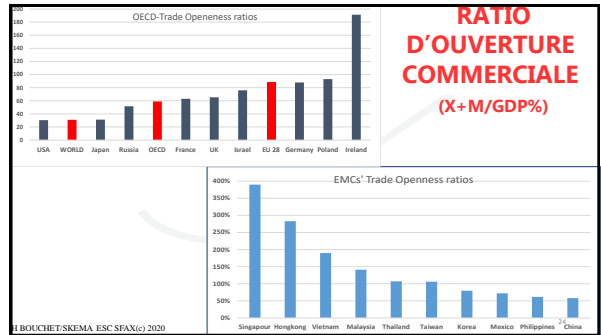
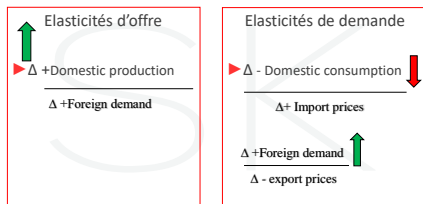
## RÉDUIRE LE DÉFICIT COMMERCIAL?

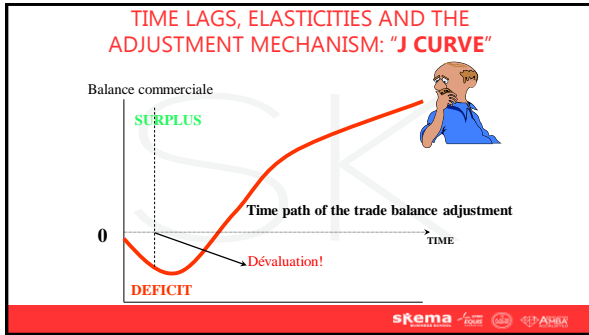
- ▶ Import elasticity of domestic economic growth  
 $\Delta M / \Delta Y$  = Income elasticity of demand for imports: percentage of (induced) change in imports divided by the percentage of change in income: if M double while Y is growing 50%, the value of income elasticity = 2.

## ELASTICITÉS ET IMPACT DES PRIX RELATIFS SUR LA BALANCE COMMERCIALE?

- ▶ **Import demand elasticity** to prices =  
 $\Delta MD / \Delta P \$ < 0 ?$   
 Terms of trade (deterioration post devaluation): it takes more units of Exports to buy x units of imports
- ▶ **Export elasticity** to foreign demand change =  
 $\Delta X / \Delta FD \$ > 0 ?$   
 This elasticity depends on foreign demand and on trade competitors
- ▶ **Supply elasticity** to foreign demand =  
 $\Delta S / \Delta FD > 0 ?$   
 This elasticity depends on the availability of finance, equipment, (imported) inputs, labor...

## DÉVALUATION: QUEL IMPACT? LES ÉLASTICITÉS = RATIO DE DEUX VARIATIONS





### LE FINANCEMENT DU DÉFICIT COURANT DANS LE COMPTE DE CAPITAL?

**Compte de capital**

- + (-) IDE (flux de capitaux non-créateurs de dette)
- + (-) Investissement de portefeuille (FCNCD)
- + (-) Flux de capitaux LT (privés + publics)
- + (-) Flux de capitaux CT (privés + publics)
- + (-) Erreurs & omissions
- + (-) Contreparties de réévaluations d'actifs
- + (-) Variation des réserves

= Balance des capitaux

+ Financement exceptionnel et/ou arriérés

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### LE FINANCEMENT DU DÉFICIT COURANT

DEFICIT COURANT \$	FINANCEMENT	MONTANT \$	Déficit résiduel \$
-800	IDE →	100	-700
	Portefeuille →	50	-650
	Long-terme public IFIs	150	-500
	Long-terme privé: banques	80	-420
	LT obligations	250	-170
	Court-terme	150	-20
	Erreurs & Omissions	-225	-245
	Variation des réserves	?	0
	Arriérés ou FMI		27

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### SOURCES DE FINANCEMENT ?

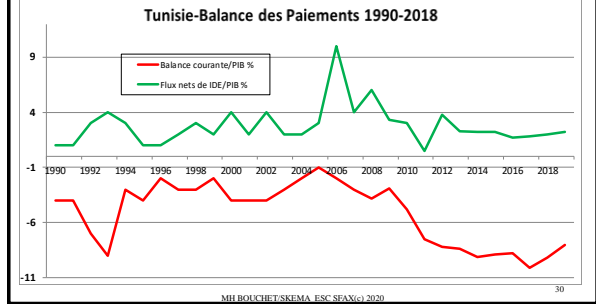
Extérieur	Extérieur
➤ Privé	➤ Public
<ol style="list-style-type: none"> <li>1. IDE</li> <li>2. Club de Londres</li> <li>3. Crédit export</li> <li>4. Transferts privés</li> </ol>	<ol style="list-style-type: none"> <li>1. Bilatéral = Club de Paris + UE + Qatar</li> <li>2. Multilatéral = FMI+BAD+BI+BEI</li> </ol>
➤ Intérieur Epargne + Crédit bancaire	

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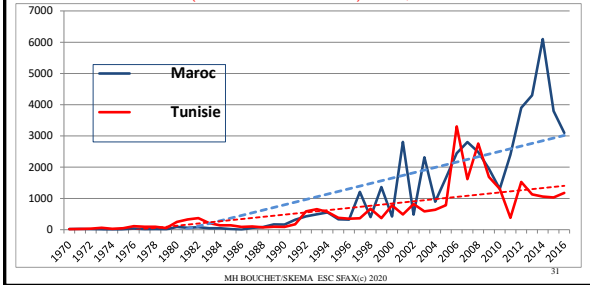
**Table 3. Tunisia: Balance of Payments, 2015-19 1/**  
(In millions of U.S. dollars, unless otherwise indicated)

	2015			2016			2017			2018			2019		
	Annual	Q1	Q2	Annual	Q1	Q2	Annual	Q1	Q2	Annual	Q1	Q2	Annual	Q1	Q2
<b>Current account balance</b>	<b>-3,809</b>	<b>-3,664</b>	<b>-4,074</b>	<b>-1,177</b>	<b>-1,817</b>	<b>-755</b>	<b>-819</b>	<b>-1,909</b>	<b>-4,018</b>	<b>-782</b>	<b>-1,008</b>	<b>-472</b>	<b>-936</b>	<b>-3,415</b>	<b>-3,616</b>
Trade balance	-6,029	-6,006	-6,208	-1,787	-2,620	-1,514	-1,213	-4,472	-5,144	-1,058	-1,410	-1,466	-1,215	-4,170	-3,006
Exports	14,073	13,168	14,231	4,176	3,919	3,665	4,195	16,125	17,118	4,393	4,200	3,866	4,465	15,204	16,914
Imports	1,013	765	846	235	213	215	320	983	1,037	296	222	238	316	1,072	924
Non-energy	13,061	12,864	13,364	3,346	3,086	3,050	3,875	15,121	16,121	4,098	4,078	3,629	4,129	15,333	15,992
of which: non food	11,017	11,368	11,644	3,270	3,151	3,288	3,556	13,265	14,131	4,008	4,078	3,629	4,129	14,051	13,870
Energy	-19,102	-18,174	-19,518	-6,361	-3,939	-3,939	-5,318	-20,409	-22,702	-5,482	-5,710	-5,352	-4,660	-22,974	-22,012
Imports	-2,742	-2,024	-2,513	-802	-472	-814	-933	-3,242	-3,479	-723	-776	-768	-676	-2,842	-3,143
Non-energy	-16,361	-16,151	-17,005	-4,559	-4,457	-4,554	-4,385	-19,234	-21,229	-4,759	-4,934	-4,584	-4,956	-19,232	-18,864
of which: non food	-14,432	-14,567	-15,101	-4,551	-4,163	-4,036	-4,048	-16,272	-17,096	-4,729	-4,934	-4,584	-4,956	-18,855	-18,492
Services and transfers (net)	1,186	1,152	1,214	10	292	779	444	1,568	1,514	277	305	915	276	5,255	1,400
Services	303	320	305	-51	101	446	152	648	619	79	133	444	32	689	518
of which: tourism	2,315	1,920	1,870	233	278	627	344	1,648	1,375	253	356	587	347	1,560	1,412
Transfers (net)	877	792	929	61	192	333	312	917	895	197	251	370	247	1,565	922
of which: workers' remittances	1,945	1,794	1,861	430	404	589	571	2,006	2,005	480	503	626	511	2,160	2,004
of which: interest payments on external debt	-156	-161	-141	-239	-156	-173	-225	-794	-743	-226	-230	-218	-222	-896	-874
of which: gift	0	14	25				28	24						52	15
<b>Capital and financial account</b>	<b>4,352</b>	<b>3,183</b>	<b>4,978</b>	<b>551</b>	<b>1,134</b>	<b>806</b>	<b>1,664</b>	<b>4,228</b>	<b>4,464</b>	<b>1,076</b>	<b>1,260</b>	<b>1,013</b>	<b>1,084</b>	<b>4,433</b>	<b>4,244</b>
Capital account balance	225	95	183	5	3	60	10	77	125	4	-14	14	7	82	72
Financial account balance	4,027	3,088	3,895	546	1,132	746	1,554	4,147	4,339	1,072	1,274	999	1,077	4,351	4,172
Direct investment and portfolio (net)	1,122	618	746	169	182	137	224	723	812	191	230	223	115	958	1,061
Medium- and long-term loans (net)	-2,862	-1,015	-2,532	168	-41	407	1,088	1,899	2,036	426	405	409	361	1,627	1,288
Disbursements	3,572	2,514	4,861	458	446	1,056	1,690	3,520	4,717	1,030	1,015	1,000	986	4,050	3,750
of which: private	763	645	954	144	134	330	163	579	589	345	343	341	339	568	510
Amortization	-12,120	-1,473	-2,239	-450	-489	-648	-602	-2,029	-2,082	-683	-609	-591	-600	-2,483	-2,462
Short-term capital	543	1,395	578	209	962	1	342	1,534	891	463	629	348	376	1,816	1,627
<b>Errors and omissions 2/</b>	<b>-17</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Overall balance</b>	<b>385</b>	<b>-489</b>	<b>4</b>	<b>-426</b>	<b>-3</b>	<b>50</b>	<b>825</b>	<b>316</b>	<b>454</b>	<b>295</b>	<b>234</b>	<b>342</b>	<b>148</b>	<b>1,019</b>	<b>613</b>

FINANCER LE DÉFICIT COURANT?



FINANCEMENTS DE COMPTE COURANT PAR « FLUX NON-CRÉATEURS DE DETTE » (IDE ET PORTEFEUILLE) EN US\$ MILLIONS






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Exports	5000
Portfolio	150
LT K	1200
Transfers	285
Debt repayments	-1650
ST K	350
Current account	
FDI	325
Imports	-6500
Trade	
Services revenues	1200
Interest payments	-750
E&Os	-455
Counterpart items	100
Change in reserves	
CA/GDP%	
GDP	12500
R/M ratio (months)	
Reserve level 12/2017	4500




RUCHET-SKEMA ESC SFXA(0) 2020




Exports	5000
Imports	-6500
Trade	-1500
Services revenues	1200
Interest payments	-750
Transfers	285
Current account	-765
FDI	325
Portfolio	150
LT K	1200
Debt repayments	-1650
ST K	350
E&Os	-455
Counterpart items	100
Change in reserves	745
CA/GDP%	-6,12%
GDP	12500
R/M ratio (months)	6,9
Reserve level 12/2017	4500

MIH BOUCHET-SKEMA ESC SFXA(0) 2020

L'analyse de la Balance des Paiements est au cœur de celle du Risque-Pays

- + Exportations de biens f.o.b.
- Importations de biens f.o.b.

= **Balance commerciale** ENTREES

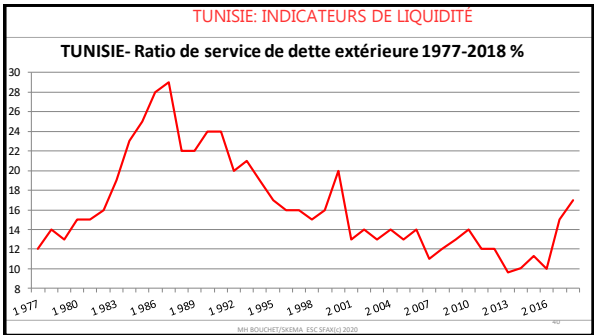
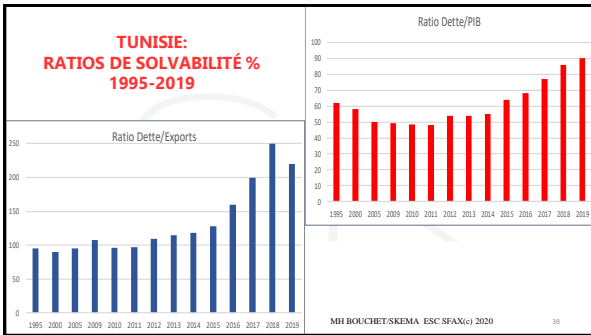
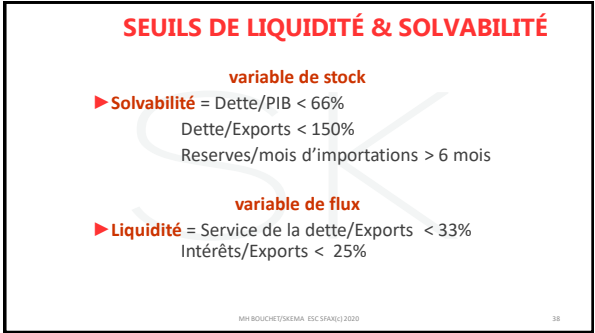
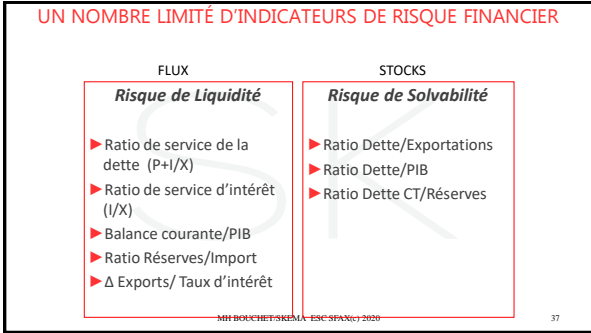
- +/- Exportations de services non financiers
- +/- Paiements d'intérêt (débit)
- + (-) Transferts privés et officiels

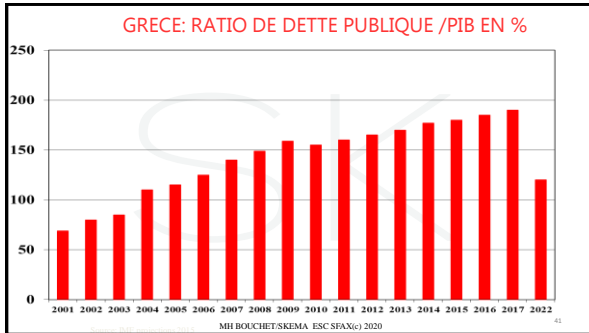
= **Balance courante**

- +/- IDE
- +/- Flux de capitaux de portefeuille
- + Flux de capitaux à LT
- Amortissement de la dette extérieure
- +/- Flux de capitaux à CT

= **Variation des réserves officielles** SORTIES

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### RATIOS DE LIQUIDITÉ & DE SOLVABILITÉ

RATIOS %	Tunisie	Maroc	Algérie	Egypte	Jordanie	Vietnam	Afr. Sud
Balance courante/PIB	-8,6	-3	-17	-5	-9	-7,3	-6,4
Ratio SD	17	7	2	4	8	5	10
Ext. Dette/PIB	90	30	5	60	67	33	31
Réserves/mois d'MBS	4	7	18	4,7	8	3,3	4,2

Source: IMF/Art.IV 2018 MH BOUCHET/SKEMA ESC SFAX(c) 2020

### RATIOS DE RISQUE ET RISQUE DE RATIOS?

► La signification d'un indicateur de risque dépend du niveau d'autres indicateurs

Ex. **Ratio de service de la dette** (P+I)/X peu élevé mais exportations volatiles (cuivre, café, pétrole) + dépendance des prix et marchés de matières premières + dette à taux variable et en devises fortes + dette à court terme!

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### 2 PAYS = 2 TRAJECTOIRES D'ENDETTEMENT

Solvencia	Liquidia
Public Debt/GDP= 100%	Public Debt/GDP= 100%
<ul style="list-style-type: none"> <li>► Diversified export base</li> <li>► Diversified markets</li> <li>► Mainly official creditors</li> <li>► Long-term maturities= 12 years</li> <li>► Fixed rate for 80% of debt</li> <li>► Similar currency structure X revenues/liabilities</li> <li style="padding-left: 20px;">► = no mismatch!</li> </ul>	<ul style="list-style-type: none"> <li>► Main export: hydrocarbons</li> <li>► One main export destination: EU</li> <li>► X revenues in €/debt payments in \$</li> <li>► Average debt maturity: 3 years</li> <li>► 66% of debt on floating rates</li> <li>► Large and growing private debt (corporate, bank and households)</li> <li>► Large reliance on private capital markets</li> </ul>
► Share of foreign holders of bonds: 20%	► Share of foreign participation in bond market: 60%

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## 6. EXCEPTIONAL FINANCING

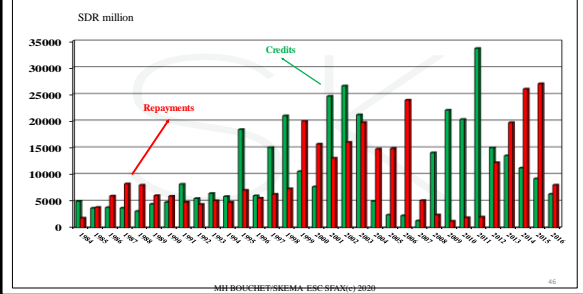
- IMF SDR Drawings
- World Bank's HIPC Initiative
- London Club debt reduction and restructuring workouts
- Paris Club debt relief
- Debt swap transactions



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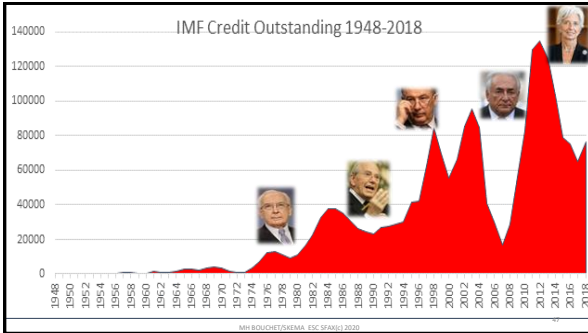
### IMF DISBURSEMENTS & REPAYMENTS 1984-2017



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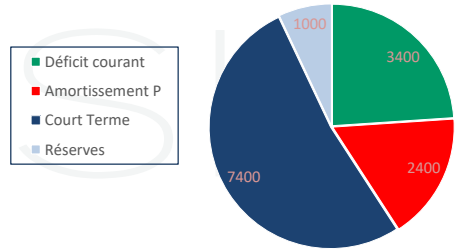
### IMF Credit Outstanding 1948-2018



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### TUNISIE: LES BESOINS DE FINANCEMENTS EXTERIEURS => \$13,5 MILLIARDS= 23% OF GDP




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**TUNISIE:**  
**CONTRAINTES DE FINANCEMENT EXTÉRIEUR?**

**Besoins de financements extérieurs > \$ 13,5 milliards**



**FMI= \$1015**

**BIRD & IFIs + Paris Club = \$1500**

**Risque-Pays**

- IDE/Portf= \$1060
- Marché des capitaux : \$1500
- Sukuk-BID= \$400
- Club de Londres (banques)=1600
- Dette à CT=7200

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**EXTERNAL FINANCING PROFILES**

RATIOS	VIETNAM	GABON	ECUADOR
1. CA/GDP	+2,1%	-9%	-3%
2. Debt/GDP	51%	45%	35%
3. Coface	B	C	C
4. GDP pc \$	2200	7700	6500
5. R/M	2	5	2
6. FDI/GDP	9%	7%	<1%
7. Doing Bus	69	169	123

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**NORTH SEA GLOBAL EQUITY MANAGEMENT**

Risk Categories	I no.	Indicators	Risk Assessment	Data Frequency	Source
<b>1. Real Economy</b>	*+, > 0	1 GDP growth rate - %	performance	quarterly	WB
	*+, > 0	2 Budget Deficit/GDP - %	overheating	quarterly	WB/IMF
	only > 0	3 REER 2005=100	competitiveness	quarterly	BIS
	*+, > 0	4 Credit growth %	overheating	quarterly	WB/IMF
	*+, > 0	5 CPI%	overheating	quarterly	IMF & CB
<b>2. External Finance</b>	*+, > 0	6 current account/GDP - %	competitiveness	quarterly	IMF&IF
	only > 0	7 DSR - % XGS	liquidity	quarterly	IMF&IF
	only > 0	8 Ext. Debt/Exports %	liquidity	quarterly	IMF&IF
	only > 0	9 Ext. Debt/GDP - %	solvency	quarterly	IMF&IF
	*+, > 0	10 Reserves coverage - months	liquidity	quarterly	IMF&IF
	only > 0	11 Net Ext Liabilities/GDP%	sustainability	quarterly	BIS/IMF
<b>3. Spill-over</b>	only > 0	12 Reserves/ST DEBT - %	liquidity	quarterly	IMF
	only > 0	13 Trade openness ratio - %	performance	quarterly	WB
<b>4. Risk Ratings</b>	only > 0	14 Capital Flight / Reserves - %	capital flight	quarterly	BIS
	in bp	15 5-year CDS	default	weekly	Bloomberg
	only > 0	16 Corruption Index	governance	annual	TI
	only > 0	17 Credit Rating	risk assessment	randomly	S&P
	only > 0	18 Human Develop Index	governance	annual	UNDP
only > 0	19 Doing Business Index	performance	annual	WB	

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