

Kreditiranje, uzimanje kredita i budžetsko ograničenje

Tražnja privatnog sektora: potrošnja i investicije

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30.10.2023.

Hipoteza o racionalnim očekivanjima

- Intertemporalni izbor (izbor između dobara u sadašnjem i budućem trenutku)
- Intratemporalni izbor (izbor između različitih dobara u istom trenutku)
- Intertemporalni izbor o potrošnji = odluka o potrošnji ili štednji
- Faktori:
 - Budući dohodak
 - Kamatne stope
- Hipoteza o racionalnim očekivanjima – ekonomski transaktori koriste sve raspoložive informacije i koriste ih stručno

Intertemporalno budžetsko ograničenje domaćinstava

- Potrošnja i intertemporalna zamjena
- Autarkija – nepostojanje razmjene
- Sadašnja diskontovana vrijednost potrošnje

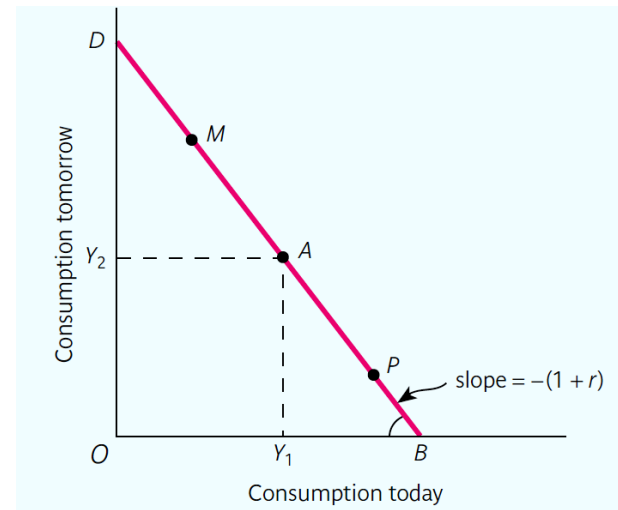
$$C_2 = Y_2 + (Y_1 - C_1)(1 + r)$$

$$C_1 + \frac{C_2}{1 + r} = Y_1 + \frac{Y_2}{1 + r} = \Omega$$

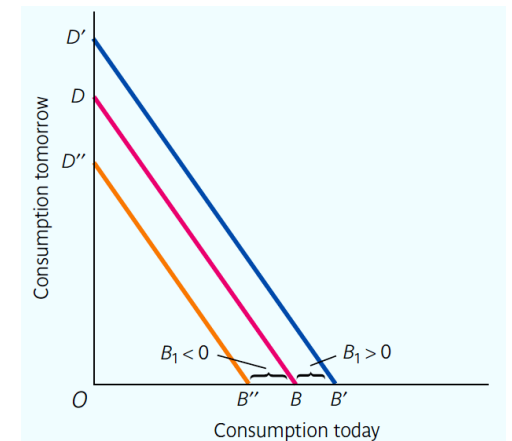
- U slučaju nasleđivanja bogatstva (ili duga):

$$C_1 + \frac{C_2}{1 + r} = Y_1 + \frac{Y_2}{1 + r} + B_1 = \Omega$$

Grafik: raspoloživost, bogatstvo i potrošnja



Grafik: nasleđivanje bogatstva ili duga



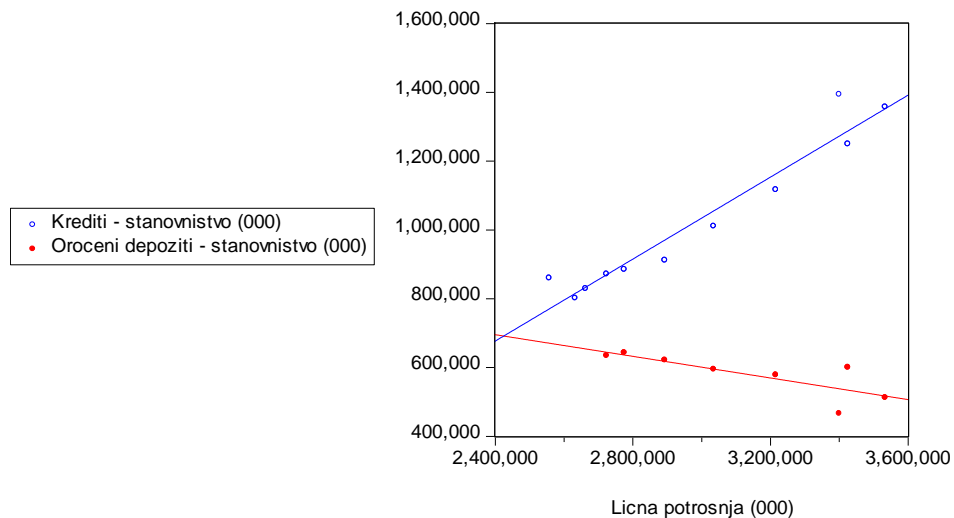
Potrošnja, štednja i kreditno zaduženje domaćinstava u Crnoj Gori

Indikatori: Crna Gora, 2010-2020

	Kamatne stope- stanovništvo	Pasivne kamatne stope- stanovništvo	Licna potrosnja domacinstava (000)	Oroceni depoziti domacinstava	Krediti- domacinstva (000)
2010			2,557,204		860,162.4
2011	10.21		2,663,066		829,721.0
2012	10.10		2,632,370		801,635.0
2013	10.11	3.05	2,723,708	634,323	872,118.0
2014	10.10	2.28	2,774,846	643,355	885,509.0
2015	9.77	1.60	2,892,977	621,513	911,760.0
2016	8.70	1.24	3,035,067	594,830	1,010,748.2
2017	8.19	0.90	3,215,527	578,380	1,116,869.5
2018	7.83	0.76	3,424,602	600,807	1,250,201.0
2019	7.54	0.56	3,533,604	512,173	1,357,738.0
2020	7.35	0.51	3,399,698	466,262	1,394,169.0

Izvor: CBCG, podaci za decembar, efektivne kamatne stope; Monstat

Licna potrosnja, stednja i krediti domacinstava, Crna Gora, 2010-2020



Korelacioni koeficijenti

	LICNA POTROSNJA	STEDNJA DOMACINSTVA	KREDITI DOMACINSTVA
LICNA POTROSNJA	1.000	-0.794	0.967
STEDNJA DOMACINSTVA	-0.794	1.000	-0.899
KREDITI DOMACINSTVA	0.967	-0.899	1.000

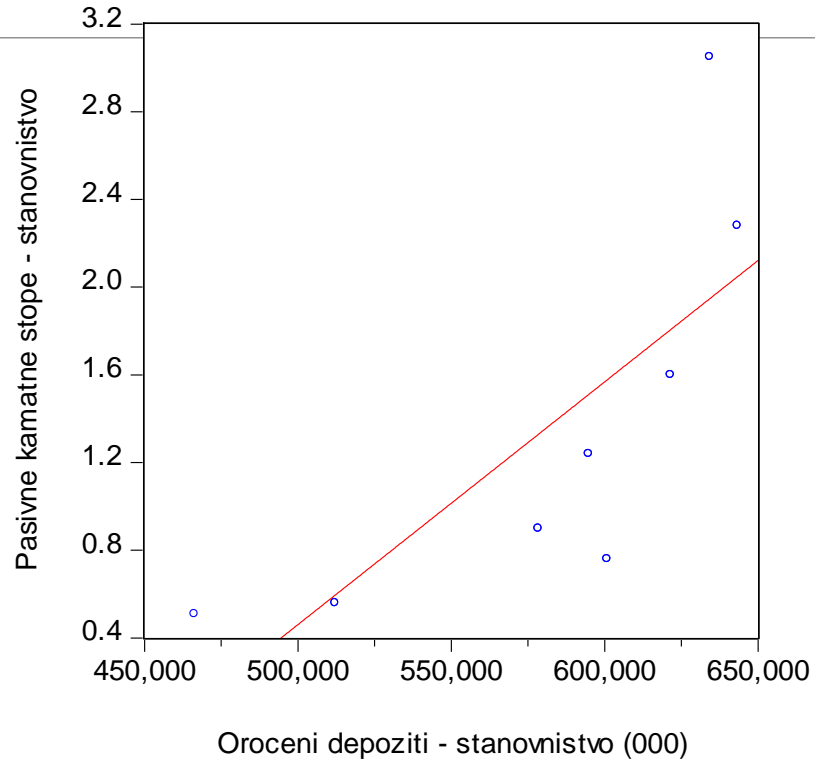
Dependent Variable: KREDITI DOMACINSTVA
 Method: Least Squares
 Date: 12/09/21 Time: 12:35
 Sample (adjusted): 2011 2020
 Included observations: 10 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
KAMATNE STOPE STANOVNISTV	-182932	14911.14	-12.26816	0
C	2687608	135098.4	19.89371	0
R-squared	0.949529	Mean dependent var	1043047	
Adjusted R-squared	0.94322	S.D. dependent var	222805.8	
S.E. of regression	53091.18	Akaike info criterion	24.77427	
Sum squared resid	2.25E+10	Schwarz criterion	24.83478	
Log likelihood	-121.871	Hannan-Quinn criter.	24.70788	
F-statistic	150.5078	Durbin-Watson stat	1.148602	
Prob(F-statistic)	0.000002			

Dependent Variable: LICNA POTROSNJA
 Method: Least Squares
 Date: 12/09/21 Time: 10:34
 Sample (adjusted): 2011 2020
 Included observations: 10 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
KAMATNE STOPE STANOVNISTVO	-281319	21667.85	-12.98324	0
C	5558602	196315.8	28.3146	0
R-squared	0.954691	Mean dependent var	3029547	
Adjusted R-squared	0.949027	S.D. dependent var	341710.1	
S.E. of regression	77148.5	Akaike info criterion	25.52171	
Sum squared resid	4.76E+10	Schwarz criterion	25.58223	
Log likelihood	-125.609	Hannan-Quinn criter.	25.45532	
F-statistic	168.5644	Durbin-Watson stat	1.884662	
Prob(F-statistic)	0.000001			

Stednja domacinstava i kamatne stope, Crna Gora, 2013-2020



Dependent Variable: STEDNJA DOMACINSTAVA
 Method: Least Squares
 Date: 12/09/21 Time: 12:30
 Sample (adjusted): 2013 2020
 Included observations: 8 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PASIVNE KAMATE	52105.49	18215.66	2.860477	0.0288
C	510461.6	29201.79	17.48049	0
R-squared	0.576938	Mean dependent va	581455.4	
Adjusted R-squared	0.506428	S.D. dependent var	61948.77	
S.E. of regression	43521.91	Akaike info criterion	24.41223	
Sum squared resid	1.14E+10	Schwarz criterion	24.43209	
Log likelihood	-95.64894	Hannan-Quinn criter	24.27828	
F-statistic	8.182329	Durbin-Watson stat	1.015505	
Prob(F-statistic)	0.028784			

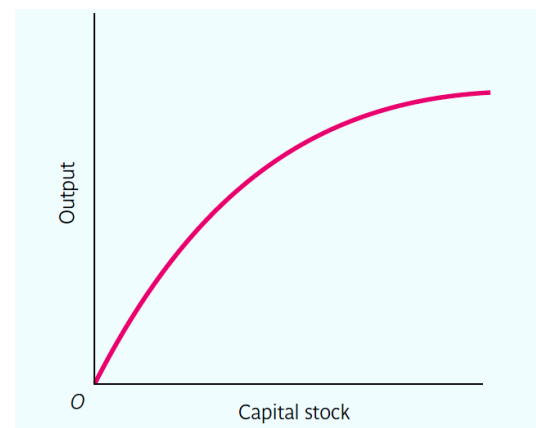
Firme i intertemporalno budžetsko ograničenje privatnog sektora

- Investiranje – korišćenje resursa u cilju uvećanja proizvodnje u budućnosti
- Intertemporalni aspekt u donošenju investicionih odluka
- Firme investiraju kapital ukoliko očekuju profit, a profit zavisi od očekivanih budućih prihoda
- Finansiranje investicija: sopstvena sredstva i (ili) pozajmljena sredstva

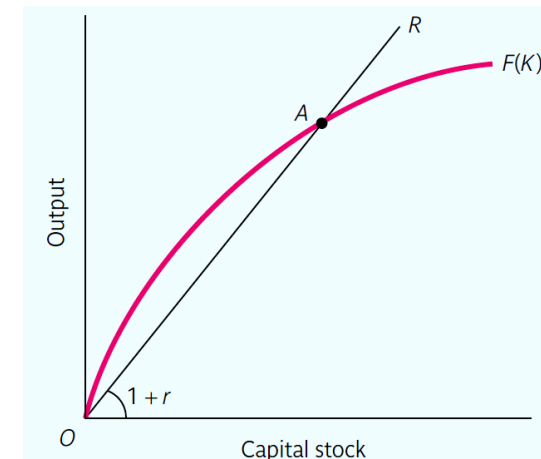
Investicione odluke

- Investicione odluke zavise od vrijednosti outputa koji se može proizvesti uz pomoć raspoloživog kapitala
- Princip opadajuće marginalne produktivnosti
- U situaciji kada je današnji kapitalni stock jednak nuli, današnje investicije određuju vrijednost kapitala koji će biti iskorišćen u proizvodnji u budućnosti
- Raspoloživi kapital može se pozajmiti (prihod je jednak $(1+r)$), ili se može uložiti u nabavku opreme (prihod je određen proizvodnom funkcijom, a kamatna stopa predstavlja oportunitetni trošak)

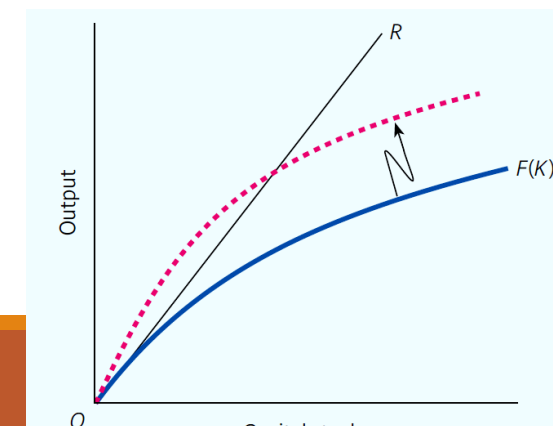
Grafik: Proizvodna funkcija



Grafik: Produktivna tehnologija



Grafik: neproduktivna tehnologija



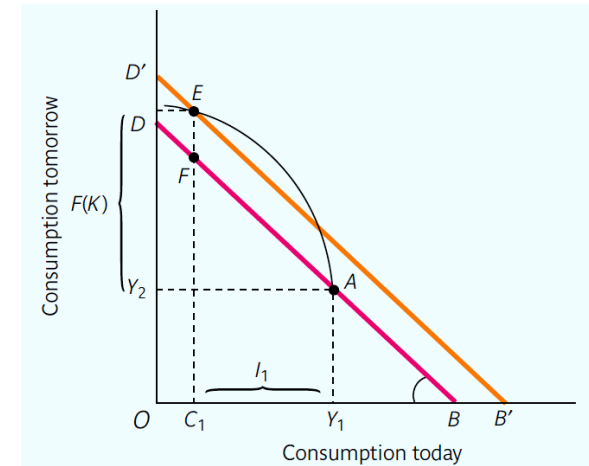
Troškovi investiranja

- Sadašnja vrijednost budućih prihoda

$$V = \frac{f(K)}{1+r} - K$$

- Investicija je opravdana jedino ako je njena sadašnja vrijednost pozitivna
- Profitabilne investicije uvećavaju bogatstvo

Grafik: Investicije povećavaju bogatstvo



Intertemporalno budžetsko ograničenje

- Kapital sutra jednak je današnjim investicijama

$$K_2 = I_1 = Y_1 - C_1$$

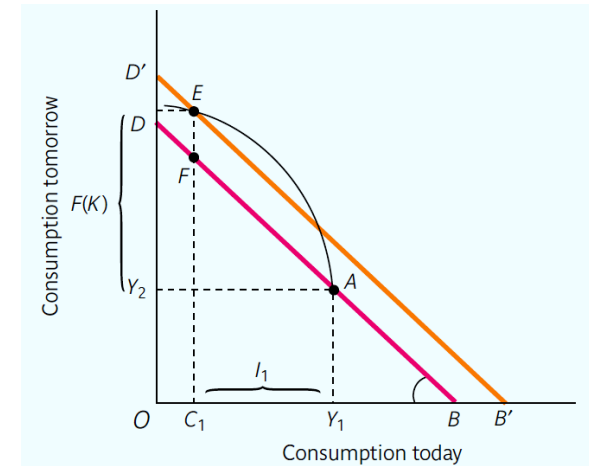
- Veće današnje investicije znače veću proizvodnju i dohodak sutra
- Budući dohodak jednak je:

$$C_2 = Y_2 + f(K_2)$$

- Sadašnja vrijednost potrošnje

$$C_1 + \frac{C_2}{1+r} = \Omega = \left[Y_1 + \frac{Y_2}{1+r} \right] + V$$

Grafik: Investicije povećavaju bogatstvo



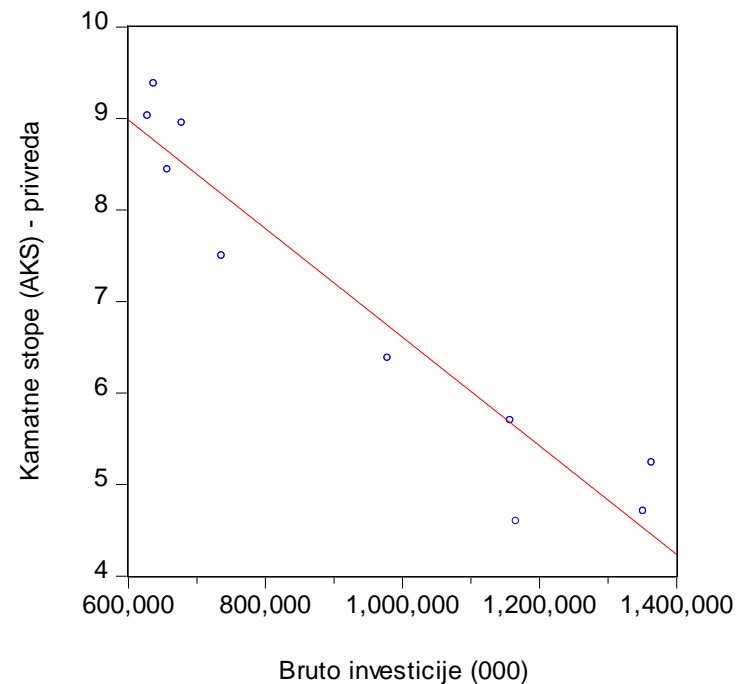
Bruto investicije i kamatne stope u Crnoj Gori

Indikatori: Crna Gora, 2010-2020

	Kamatne stope-privreda	Bruto investicije u osnovna sredstva (000)
2010		676,341
2011	9.38	636,990
2012	9.03	628,352
2013	8.95	678,100
2014	8.44	657,123
2015	7.50	736,277
2016	6.38	978,475
2017	5.70	1,157,403
2018	5.24	1,363,930
2019	4.71	1,351,813
2020	4.60	1,166,087

Izvor: CBCG, podaci za decembar, efektivne kamatne stope; Monstat

Bruto investicije u osnovna sredstva (000) i kamatne stope, Crna Gora, 2010-2020



Budžetska ograničenja javnog i privatnog sektora

- Intertemporalni pristup
- Potrošnja države G_1 i G_2 , prihodi (neto porezi) – T_1 i T_2
- Ukoliko na početku perioda ima dug – D_1 (kamatna stopa – r_g)
- Potrošnja države danas:

$$G_1 + D_1 r_g$$

- Budžetski saldo:

$$T_1 - (G_1 + D_1 r_g)$$

- Primarni saldo:

$$T_1 - G_1$$

Budžetska ograničenja javnog i privatnog sektora

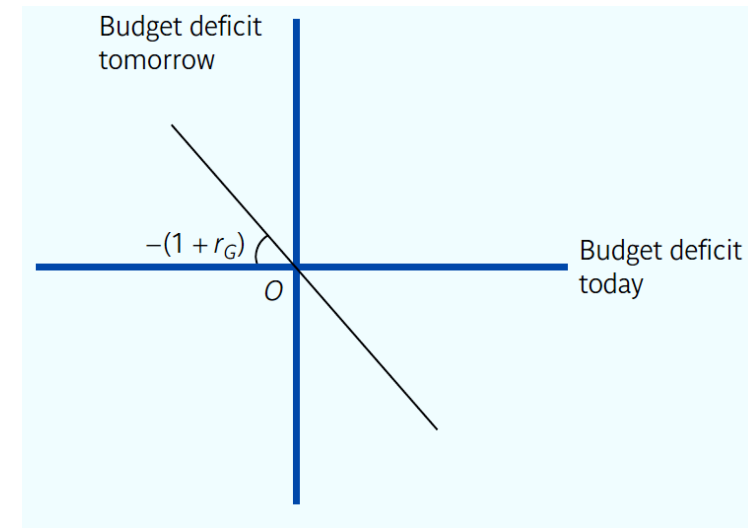
- Ako pretpostavimo da u budućem periodu država u potpunosti otplati dug:

$$T_2 - G_2 = (1 + r_g)(G_1 - T_1) + D_1 + r_g D_1 = (1 + r_g)(D_1 + G_1 - T_1)$$

- Budžetsko ograničenje države (javni dug jednak je sadašnjoj vrijednosti budžetskog suficita)

$$D_1 = (T_1 - G_1) + \frac{T_2 - G_2}{1 + r_g} = \left[T_1 + \frac{T_2}{1 + r_g} \right] - \left[G_1 + \frac{G_2}{1 + r_g} \right]$$

Grafik: Budžetska linija države



Konsolidovano javno i privatno budžetsko ograničenje

- Pretpostavke: investicije su jednake nuli i država nema javni dug

$$C_1 + \frac{C_2}{1+r} = Y_1 - T_1 + \frac{Y_2 - T_2}{1+r}$$

$$G_1 + \frac{G_2}{1+r_g} = T_1 + \frac{T_2}{1+r_g}$$

- $r \neq r_g$

$$C_1 + \frac{C_2}{1+r} = Y_1 - G_1 + \frac{Y_2 - G_2}{1+r_g} + \frac{r - r_g}{1+r_g} (G_1 - T_1)$$

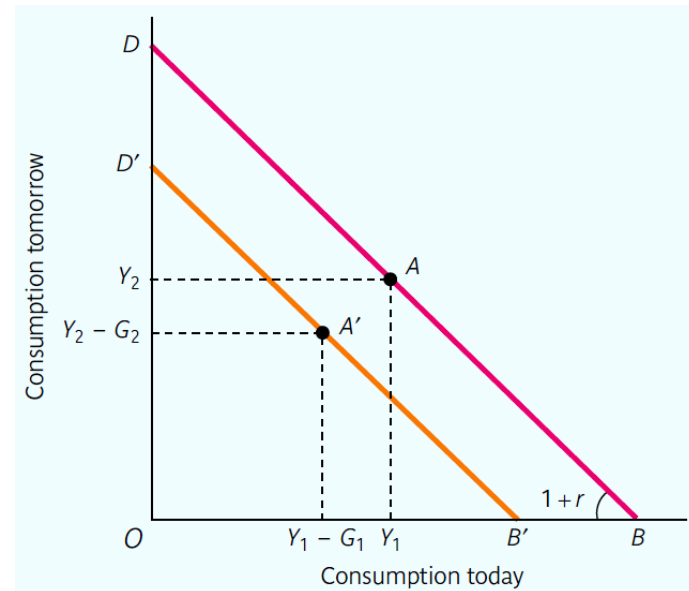
Rikardijanska jednakost

- Uz pretpostavku da je $r = r_g$

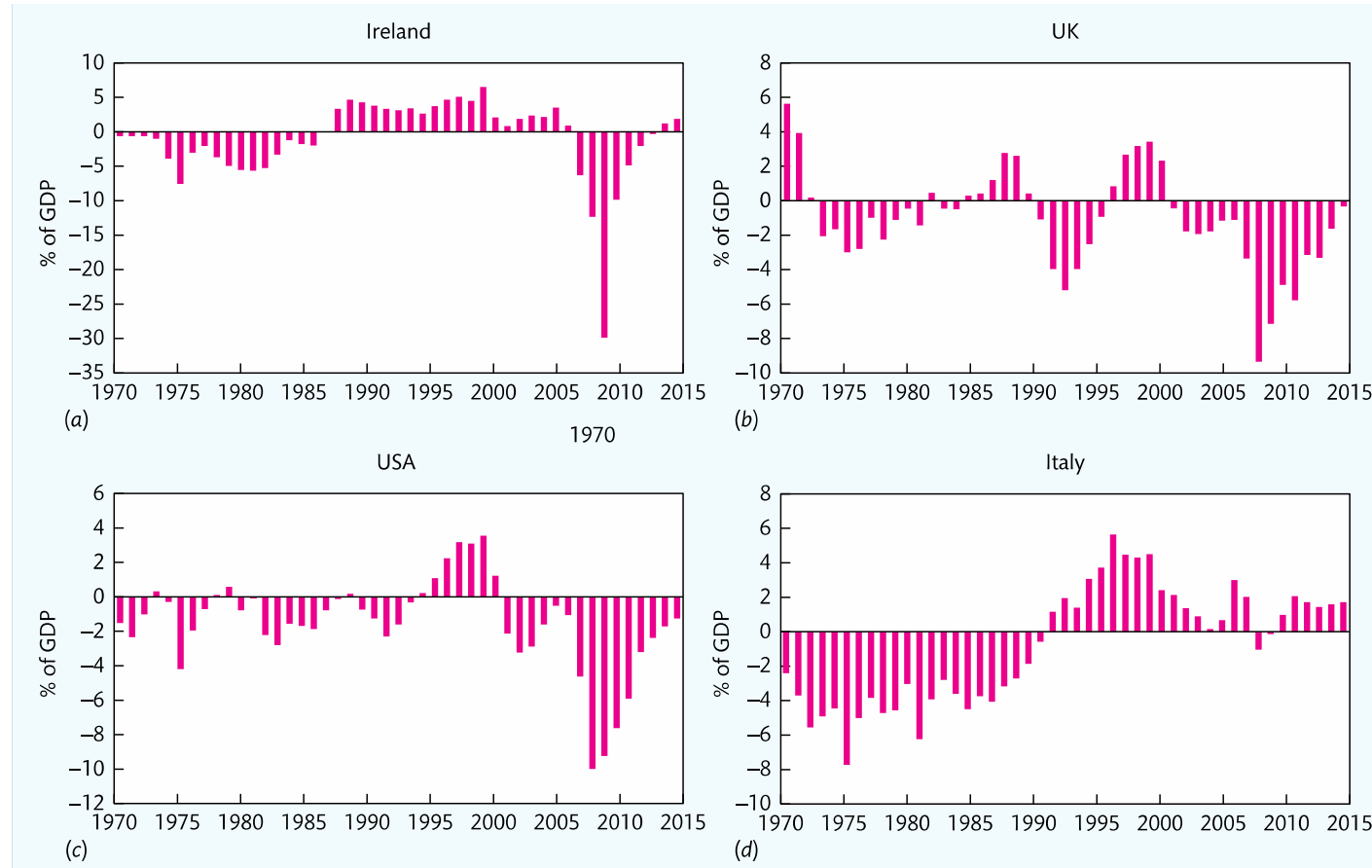
$$C_1 + \frac{C_2}{1+r} = Y_1 - G_1 + \frac{Y_2 - G_2}{1+r_g}$$

- Privatni sektor u potpunosti internalizuje budžetsko ograničenje – Rikardijanska jednakost

Grafik: Rikardijanska jednakost



Budžetski saldo (primjer)



Kamatne stope za javni i privatni sektor, dugoročne obveznice (% godišnje)

Zemlja	10-godišnje državne obveznice (2008)	Obveznice korporacija (2008)	10-godišnje državne obveznice (2015)
Australija	6,36	8,80	2,71
V. Britanija	4,71	7,45	1,90
Kanada	3,81	-	1,52
Danska	4,39	5,61	0,69
Japan	1,64	1,84	0,35
Švedska	4,06	4,71	0,72
Švajcarska	3,07	3,10	-0,07
SAD	3,86	5,97	2,14
Evro-zona	4,18	5,32	1,27
<i>Izvor: The Economist (2008),</i>		<i>OECD (2015)</i>	

Javni dug u Crnoj Gori

Javni dug Crne Gore - neto (% BDP)

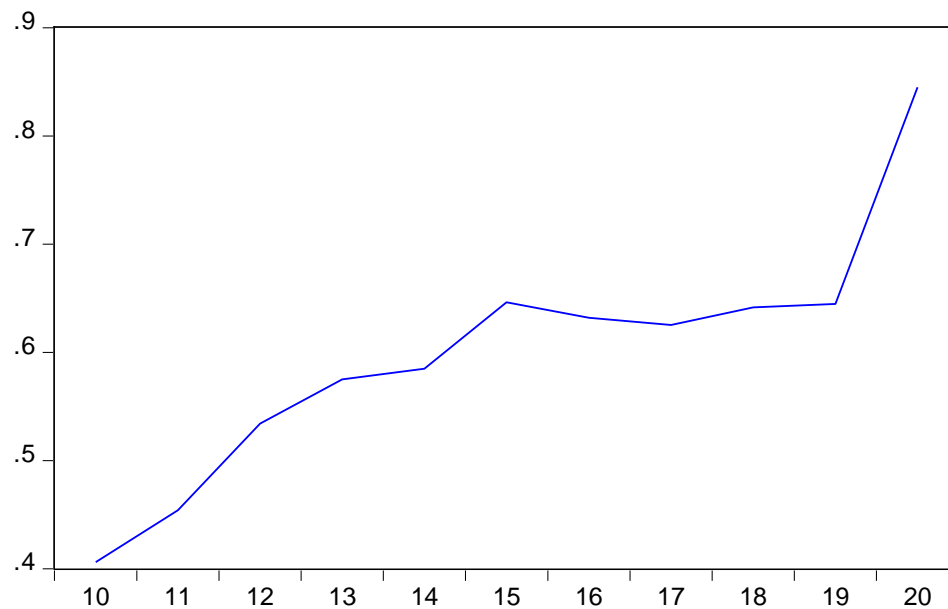


Tabela 8.5. Javni/Državni dug Crne Gore
u mil. Eura

O P I S	2014	2015	2016	2017	2018	2019	2020
	IV kvartal	IV kvartal	IV kvartal	IV kvartal	IV kvartal	IV kvartal	IV kvartal
Unutrašnji dug	381.22	320.29	400.20	413.89	392.98	579.96	495.56
Spoljni dug	1,561.69	1,956.36	2,002.76	2,213.97	2,760.00	3,128.47	3,835.27
Državni dug	1,942.91	2,276.65	2,402.96	2,627.86	3,152.98	3,708.43	4,330.83
Dug jedinica lokalnih samouprava	128.80	142.18	143.09	130.97	115.58	80.40	78.12
Javni dug (bruto)	2,071.71	2,418.83	2,546.05	2,758.83	3,268.56	3,788.83	4,408.95
Depoziti Ministarstva finansija	49.50	57.25	47.36	70.90	276.83	597.13	872.43
Javni dug (neto)	2,022.21	2,361.58	2,498.69	2,687.93	2,991.73	3,191.70	3,536.52
<i>Izvor: Ministarstvo finansija i socijalnog staranja</i>	IV quarter	IV quarter	IV quarter	IV quarter	IV quarter	IV quarter	IV quarter
	2014	2015	2016	2017	2018	2019	2020

Table 1. Impact of public debt growth on GDP growth, Western Balkans, 1998-2019 (panel data analysis)

Dependent Variable: DLOG(GDP US 2010)
 Method: Panel Least Squares
 Sample (adjusted): 1998 2019
 Cross-sections included: 6
 Total panel (unbalanced) observations: 111

Variable	Coefficient	Std. Error
DLOG(PUBLIC DEBT US2010)	-0.036*	0.016
C	0.036***	0.002

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Authors' calculation

Graph 1. Public Debt (% GDP), Western Balkan countries, 1996-2019

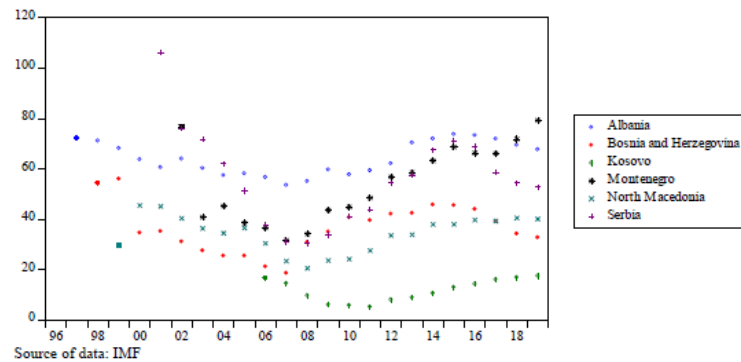


Table 2. Impact of public debt growth on productivity growth, Western Balkans, 2001-2019 (panel data analysis)

Dependent Variable: DLOG(PRODUCTIVITY)
 Method: Panel Least Squares
 Sample (adjusted): 2001 2019
 Cross-sections included: 5
 Total panel (unbalanced) observations: 92

Variable	Coefficient	Std. Error
DLOG(PUBLIC DEBT US2010)	-0.079**	0.034
C	0.02***	0.004

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Authors' calculation

Table 3. Budget revenues in Montenegro, % of GDP, 2006-2020.

	Taxes	Contributions	Fees, benefits, other income, loan repayment receipts, donations	Basic revenues	Revenues from the assets sale	Loans	Total revenues
	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP
2006	23.0	11.8	4.9	39.7	0.9	1.1	41.7
2007	26.3	11.4	4.2	42.0	1.0	0.4	43.4
2008	26.7	11.0	3.9	41.5	0.8	0.3	42.7
2009	23.8	10.3	5.2	39.3	3.6	8.6	51.4
2010	21.6	12.2	2.8	36.6	0.2	7.2	44.0
2011	21.6	10.8	2.3	34.7	0.1	7.2	42.0
2012	21.6	11.4	2.4	35.4	0.1	10.1	45.6
2013	22.5	11.9	2.7	37.0	0.4	9.9	47.3
2014	24.1	12.8	2.2	39.1	0.2	15.5	54.8
2015	22.0	12.0	2.3	36.3	0.2	22.8	59.3
2016	22.4	11.7	3.5	37.6	0.1	16.4	54.1
2017	22.6	11.5	2.3	36.4	0.1	14.3	50.8
2018	22.9	11.2	3.3	37.4	0.3	24.1	61.9
2019	23.7	11.0	3.4	38.1	0.1	20.5	58.7
2020	23.0	12.7	3.4	39.1	0.2	32.1	71.4
Avg	23.2	11.6	3.3	38.0	0.6	12.7	51.3

Source: Authors' calculation based on CBMN data (<https://www.cbeg.me/me/statistika/statisticki-podaci/fiskalni-sektor>)

Table 4. Budget expenditures, deficit and public debt in Montenegro, % GDP, 2006-2020.

	Gross wages and contributions paid by the employer	Expenses for materials and services	Interest	Other current expenditures	Total current expenditures	Transfers for social protection	Transfers to individual NGOs and the public sector	Capital budget-capital expenditures	Other expenditures	Consolidated expenditures	Total expenditures	Cash surplus/deficit	Public debt (gross)
	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP	% GDP
2006	9.8	5.2	1.1	4.1	20.1	12.0	2.2	0.0	2.0	36.3	41.1	3.4	32.3
2007	9.5	5.1	1.0	2.7	18.4	11.1	2.1	3.1	0.7	35.4	41.4	6.6	27.4
2008	8.9	3.7	0.7	4.9	18.2	11.2	6.9	2.4	2.4	41.0	45.0	0.6	28.8
2009	8.7	3.7	0.8	4.0	17.1	13.8	6.8	3.8	2.0	43.5	49.5	-4.2	38.1
2010	9.1	3.6	1.0	3.8	17.4	13.5	5.6	2.0	1.5	40.1	47.0	-3.5	40.6
2011	11.4	3.4	1.4	3.2	19.4	13.9	2.7	2.1	2.4	40.4	45.4	-5.7	45.4
2012	11.8	4.8	1.8	2.6	21.0	15.1	1.0	2.4	2.4	41.9	46.7	-6.5	53.4
2013	11.0	2.3	2.0	2.7	18.0	14.4	2.8	2.3	5.9	43.4	48.1	-6.4	57.5
2014	11.2	2.4	2.2	4.3	20.1	14.2	2.9	2.2	2.9	42.2	54.8	-3.1	59.9
2015	10.5	2.3	2.2	3.0	18.0	13.3	3.7	6.5	2.2	43.9	58.7	-7.6	66.2
2016	10.7	2.3	2.1	3.6	18.7	14.0	4.3	1.6	2.0	40.7	54.2	-3.1	64.4
2017	10.4	2.2	2.3	2.8	17.7	12.5	3.9	6.4	1.8	42.3	50.6	-5.8	64.2
2018	9.9	2.4	2.1	4.2	18.6	11.7	4.5	5.2	1.7	41.7	58.1	-4.2	70.1
2019	9.6	2.2	2.1	4.2	18.1	11.2	4.4	5.5	1.8	41.0	52.4	-2.9	76.5
2020	11.9	2.7	2.6	3.2	20.5	13.3	6.7	5.3	3.3	49.1	65.0	-10.0	105.1
Avg	10.3	3.2	1.7	3.6	18.7	13.0	4.0	3.4	2.3	41.5	50.5	-3.5	

Source: Authors' calculation based on CBMN data

Tekući račun i nacionalno budžetsko ograničenje

Višak na tekućem računu (TR) = višak na primarnom računu (PTR) + neto dohodak od investicija (rF)

- Sadašnja vrijednost današnjih deficita mora odgovarati sadašnjoj vrijednosti sutrašnjih suficita, i obratno

$$PTR_1 + \frac{PTR_2}{1+r} \geq -F_1$$

Indikatori bilansa placanja Crne Gore

Tabela 18. Indikatori bilansa placanja Crne Gore, 2006–2016.

	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.
Saldo tekućeg računa / BDP, %	-31,0	-39,4	-49,5	-27,7	-20,3	-14,8	-15,3	-11,4	-12,4	-11,0	-16,2
Saldo roba i usluga / BDP, %	-36,9	-42,7	-53,3	-30,8	-25,4	-21,7	-24,2	-20,1	-19,8	-18,5	-22,5
Saldo robne razmjene / BDP, %	-44,5	-57,4	-65,3	-44,1	-40,7	-39,9	-43,5	-39,5	-39,8	-40,0	-41,9
Saldo usluga / BDP, %	7,7	14,7	12,0	13,4	15,3	18,2	19,3	19,4	20,0	21,6	19,4
Saldo finansijskog računa / BDP, %	30,1	47,6	51,2	25,5	20,2	16,8	14,6	11,1	7,4	6,8	13,4
Neto SDI / BDP, %	21,6	21,1	18,8	35,6	17,7	11,9	14,5	9,6	10,2	16,9	9,4
Neto zaduženje / BDP, %	-15,3	-32,3	-28,0	5,9	-3,0	-3,2	2,3	2,5	-1,8	-9,9	8,2
Neto greške i omaške / BDP, %	1,5	-8,2	-1,8	2,2	0,1	-1,9	0,4	0,2	5,0	4,1	2,8

Izvor: Kalkulacija autora na bazi podataka CBCG

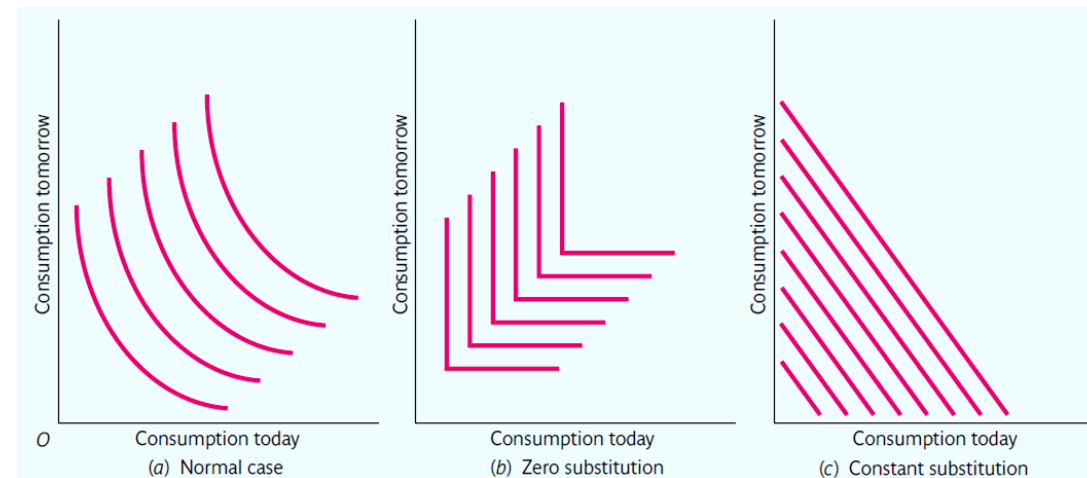
Tražnja privatnog sektora

- Agregatna tražnja: domaćinstva, kompanije, država, nerezidenti
- Privatne komponente agregatne tražnje:
 - Potrošnja
 - Investicije
- Potrošnja - izvor egzistencije i uživanja
- Investicije – sredstvo koje omogućava privredi da u budućnosti proizvede više dobara i usluga

Potrošnja

- Izvor potrošnje: dohodak od rada i imovine
- Potrošnja: sadašnja ili buduća (sadašnja štednja)
- Krive indiferencije (izbor između sadašnje i buduće potrošnje)

Grafik: Krive indiferencije



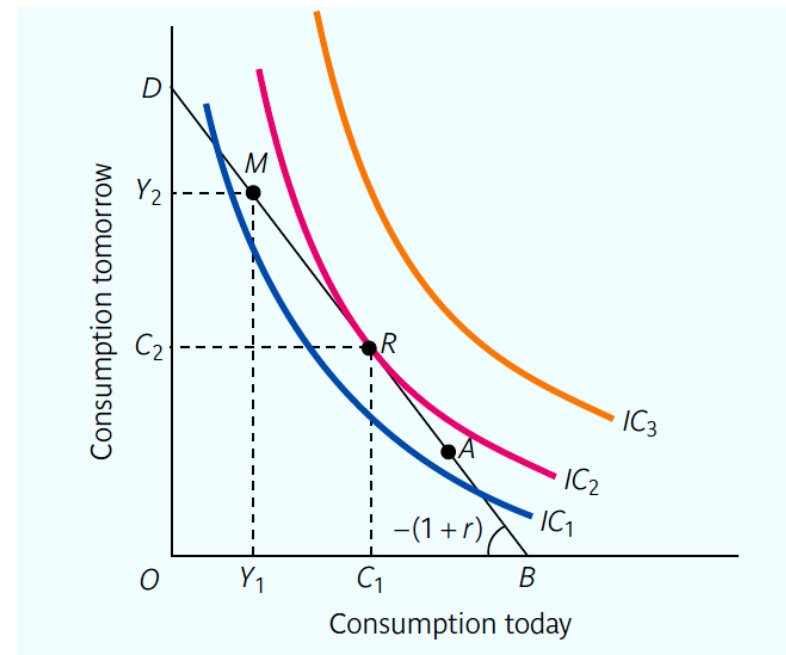
Potrošnja

- Vremenski obrazac potrošnje zavisi od sadašnje vrijednosti dohotka

$$C_1 = \frac{C_2}{1+r} = Y_1 + \frac{Y_2}{1+r} = \Omega$$

- Permanentne vs. jednokratne promjene dohotka

Grafik: Optimalna potrošnja

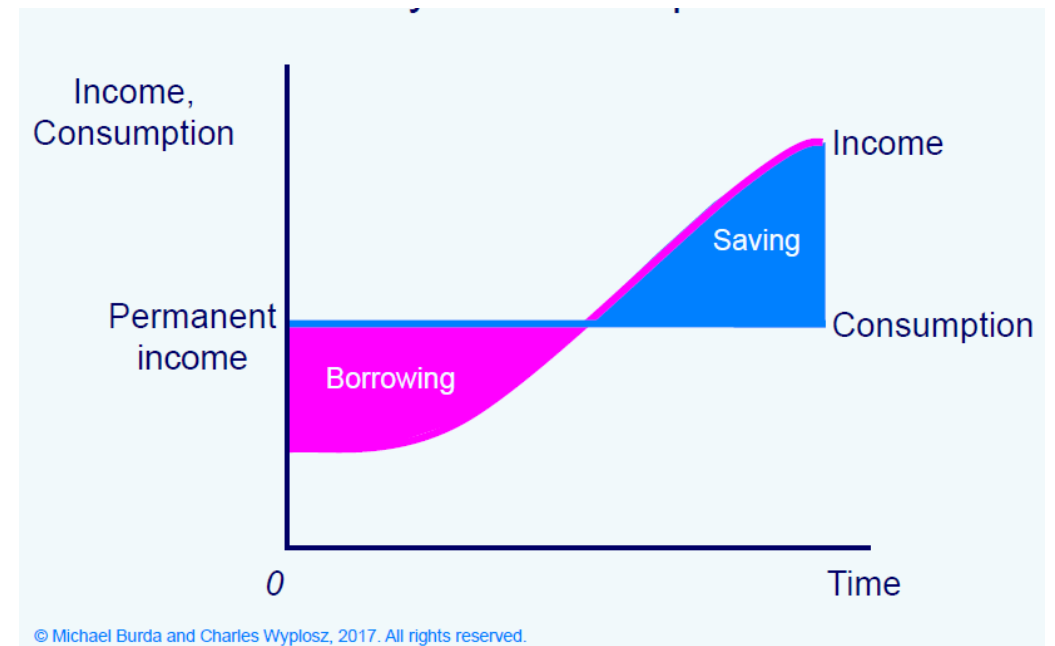


Životni ciklus potrošnje

- Permanentni dohodak – ukoliko je konstantan, izjednačava sadašnje vrijednosti očekivanog i stvarnog dohotka

$$Y^p + \frac{Y^p}{1+r} = \Omega = Y_1 + \frac{Y_2}{1+r}$$

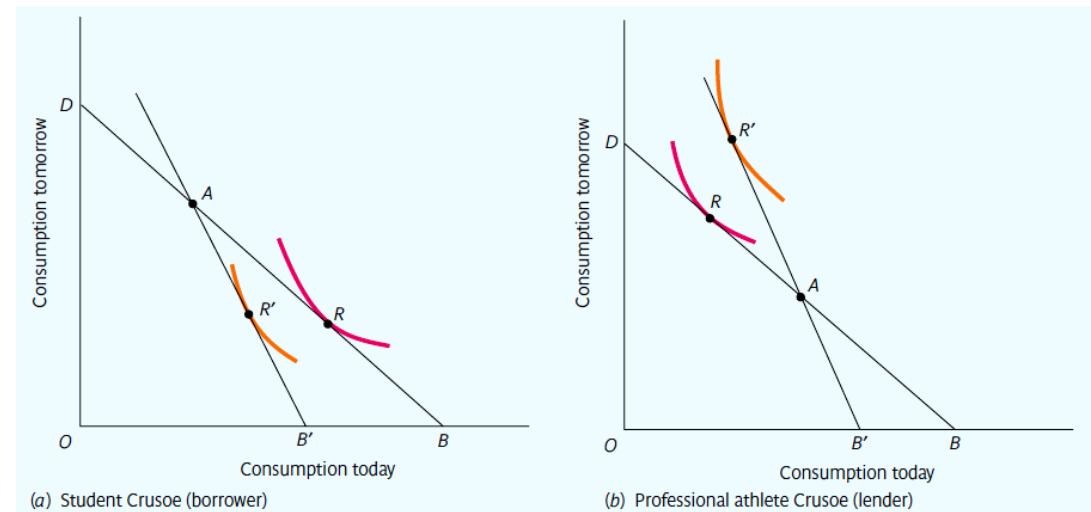
Grafik: Životni ciklus potrošnje



Potrošnja i realna kamatna stopa

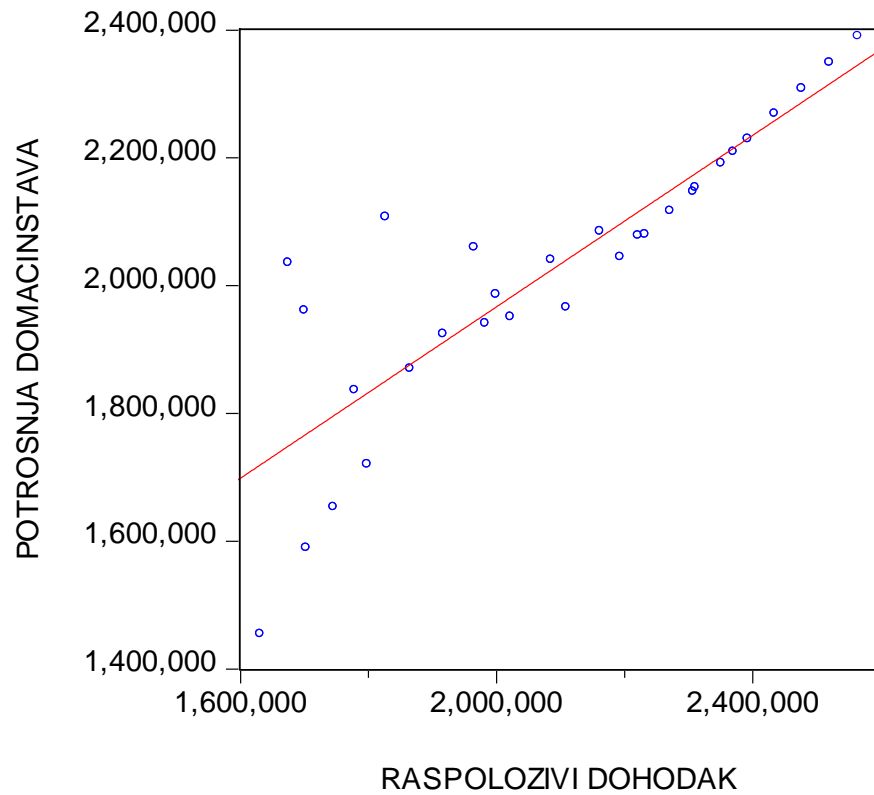
- Zajmoprimac / zajmodavac
- Rast kamatnih stopa vodi rastu prinosa na štednju
- Tekuća potrošnja zajmoprimalca opada, zbog većih troškova zaduživanja

Grafik: Uticaj kamatne stope na potrošnju



Funkcija potrošnje

$$C = f(\Omega, Y^d)$$



Dependent Variable: POTROSNJADOMACINSTAVA
 Method: Least Squares
 Date: 04/16/21 Time: 11:59
 Sample: 2000 2019
 Included observations: 20

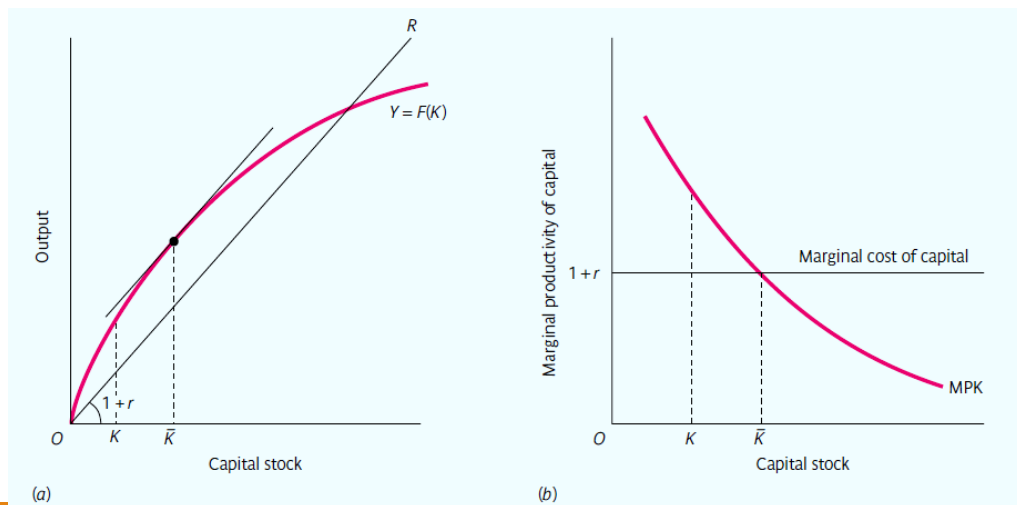
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RASPOLOZIVIDOHOD	0.930889	0.111754	8.329816	0.0000
C	154998.4	207211.5	0.748020	0.4641
R-squared	0.794017	Mean dependent var	1854813.	
Adjusted R-squared	0.782573	S.D. dependent var	345071.5	
S.E. of regression	160903.5	Akaike info criterion	26.90964	
Sum squared resid	4.66E+11	Schwarz criterion	27.00921	
Log likelihood	-267.0964	Hannan-Quinn criter.	26.92907	
F-statistic	69.38584	Durbin-Watson stat	1.146595	
Prob(F-statistic)	0.000000			

Investicije

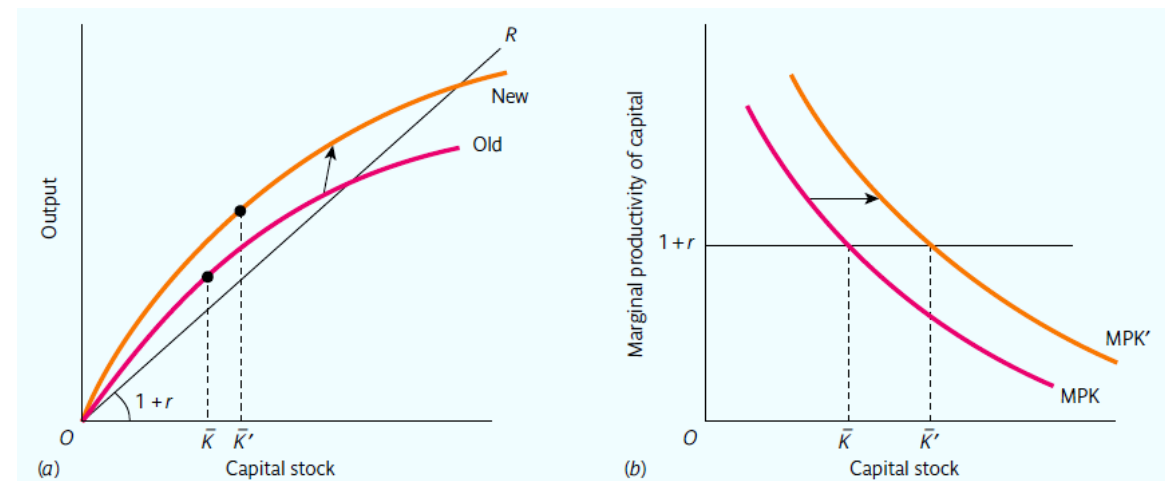
- Investiciona dobra nisu namijenjena potrošnji – omogućavaju proizvodnju dobara i usluga u budućnosti (oprema, nekretnine, zemljište, prirast zaliha)
- Odluka o investiranju – intertemporalna odluka

$$\text{profit} = f(K) - K(1 + r)$$

Grafik: Optimalni stok kapitala



Grafik: Tehnološki progres



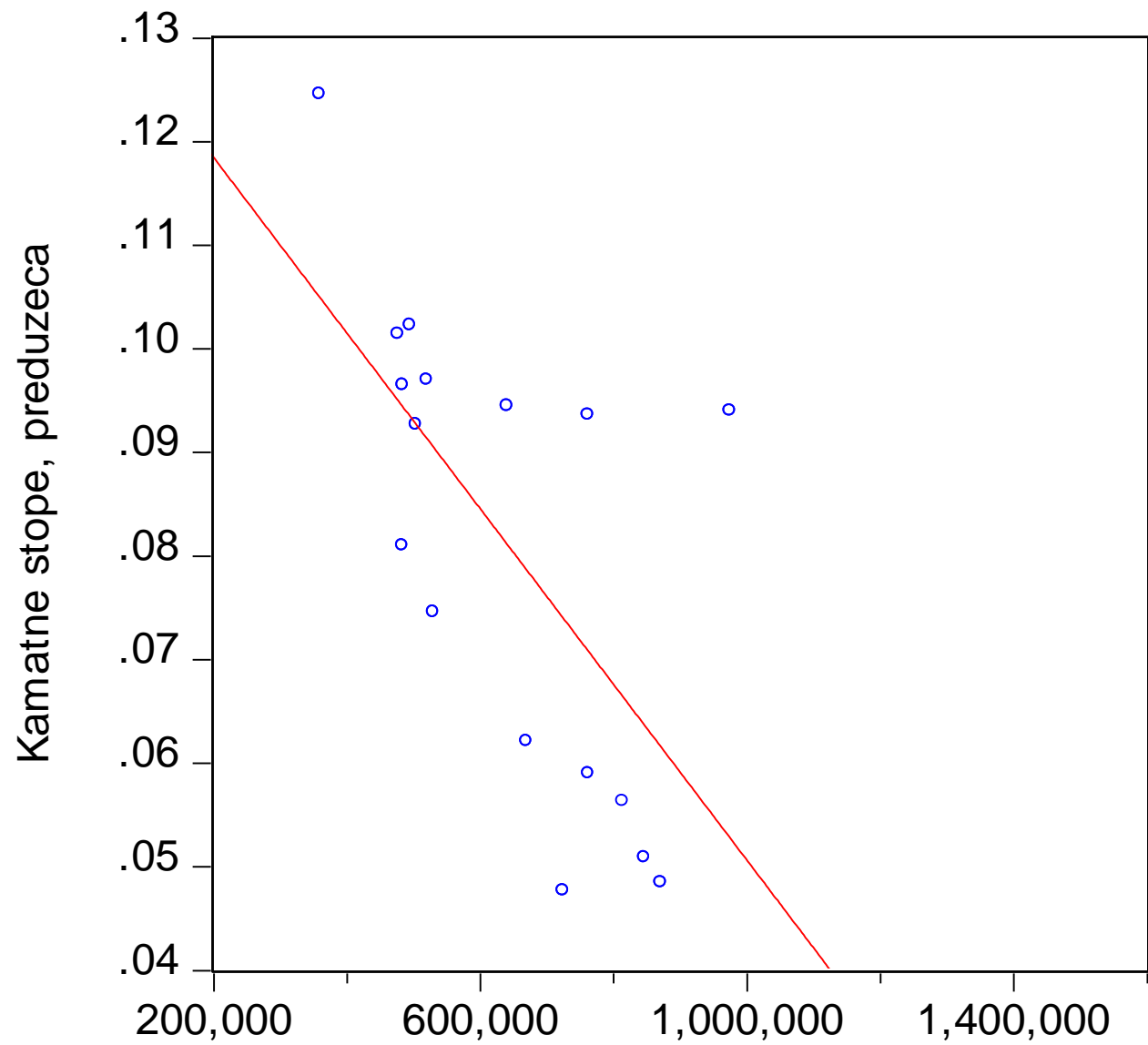
Investicije i realne kamatne stope

Princip akceleratora

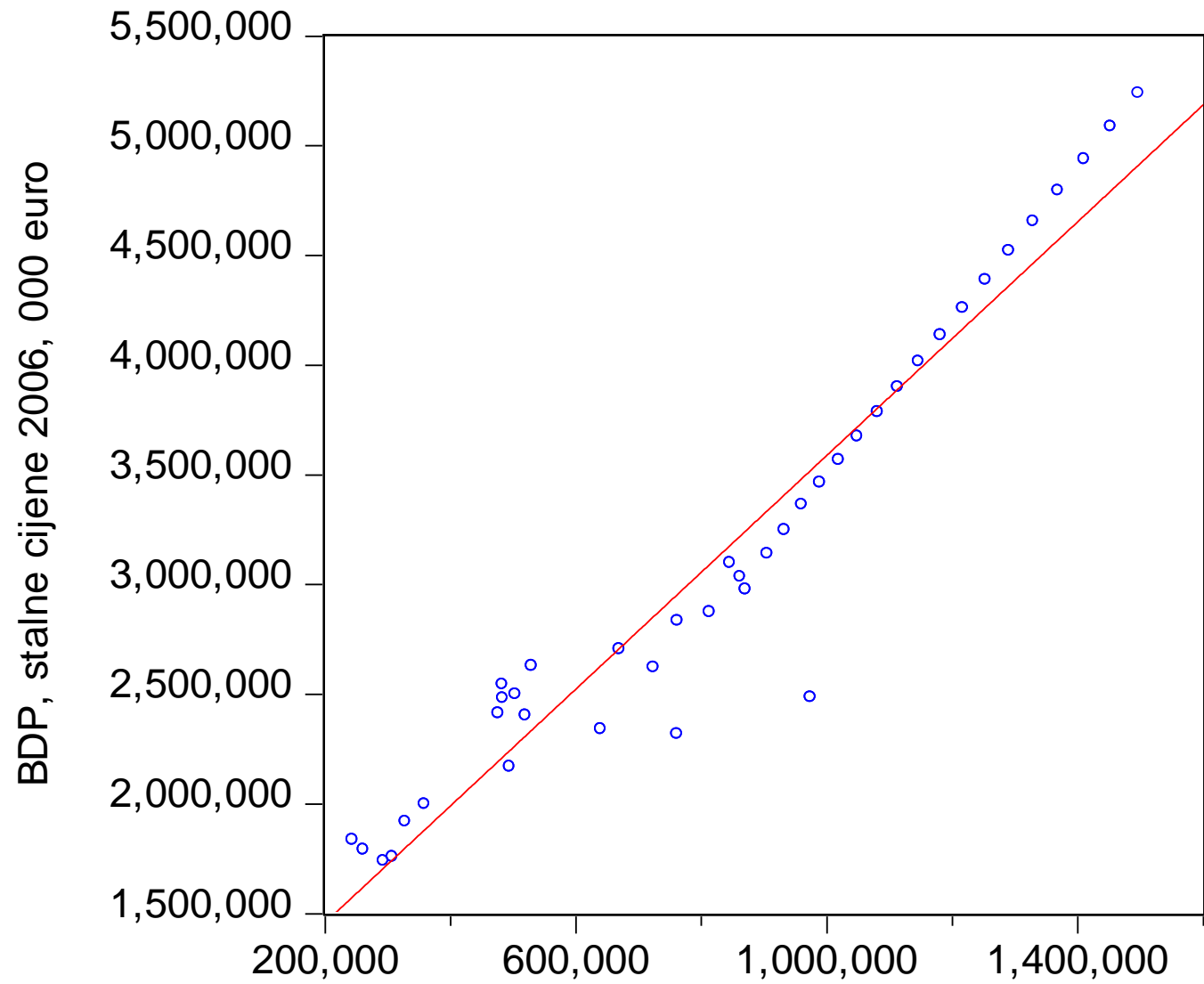
$$I = I(r)$$

- Princip akceleratora

$$I_1 = K_2 - K_1 = v(Y_2 - Y_1) = \Delta Y_2$$



Bruto investicije u osnovna sredstva, stalne 2006 cijene, 000

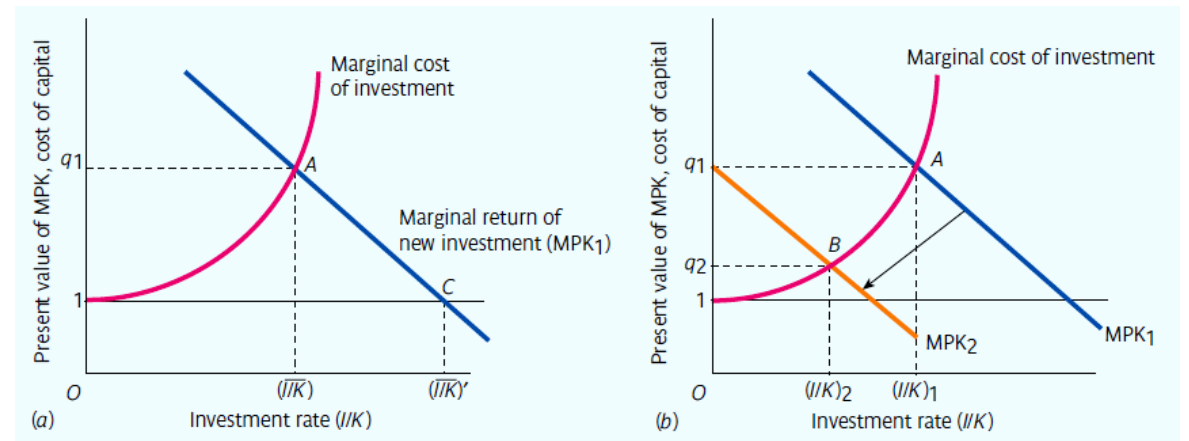


Bruto investicije u osnovna sredstva, stalne 2006 cijene, 000

Investicije i Tobinov koeficijent q

$$\text{Tobinov koeficijent } q = \frac{\text{tržišna vrijednost instaliranog kapitala}}{\text{troškovi zamjene instaliranog kapitala}}$$

Grafik: Investicije i Tobinovo q



Funkcija investicija

$$I = I(r, \Delta Y, q)$$

Materijali za čitanje

- Dynan, Karen E. 2009. "Changing Household Financial Opportunities and Economic Security." *Journal of Economic Perspectives*, 23 (4): 49-68. DOI: 10.1257/jep.23.4.49, <https://www.aeaweb.org/articles?id=10.1257/jep.23.4.49>
- Reinhart, Carmen M., Vincent R. Reinhart, and Kenneth S. Rogoff. 2012. "Public Debt Overhangs: Advanced-Economy Episodes since 1800." *Journal of Economic Perspectives*, 26 (3): 69-86. DOI: 10.1257/jep.26.3.69, <https://www.aeaweb.org/articles?id=10.1257/jep.26.3.69>
- Bisin, Alberto, Alessandro Lizzeri, and Leeat Yariv. 2015. "Government Policy with Time Inconsistent Voters." *American Economic Review*, 105 (6): 1711-37. DOI: 10.1257/aer.20131306, <https://www.aeaweb.org/articles?id=10.1257/aer.20131306>
- Kaplan, Steven N., and Per Stromberg. 2009. "Leveraged Buyouts and Private Equity." *Journal of Economic Perspectives*, 23 (1): 121-46. DOI: 10.1257/jep.23.1.121, <https://www.aeaweb.org/articles?id=10.1257/jep.23.1.121>