

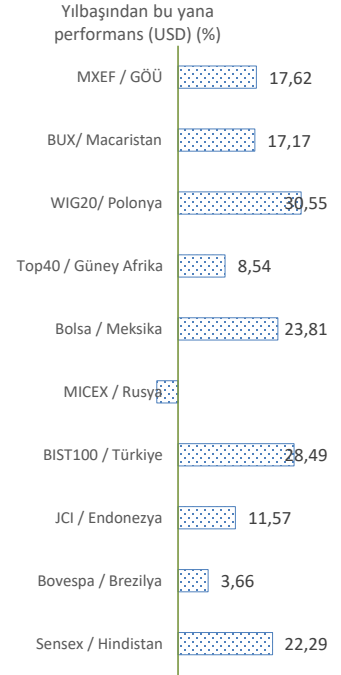
# Dijital Yatırımcı: Gelişen Ülke Endeksleri

Gelişmekte olan ülkeler ve Türkiye hisse senedi endekslerini karşılaştırmalı olarak incelediğimiz bu raporda tamamen sayısal yöntemlere dayanarak "iskontolu", "nötr" veya "primli" değerlendirmesi yaptık. Kısa vadeli endeks değerlendirmesi için geniş bir veri tabanında yer alan makro veriler kullanılarak ekonometrik metodlar oluşturuldu. Orta-uzun vadeli değerlendirmeler için reel kurlar klasik hisse senedi değerlendirme yöntemleri ve risk profili incelemesi kullanıldı. Dört ayrı kategoride incelenen sonuçlar (Model, Reel Kur, Değerleme ve Risk Profili) birleştirilerek ülkeler için notlandırma yapıldı. Ortaya çıkan notlandırmada primli olan ülkelere, teknik olarak zayıflayanlar için satım sinyalleri, iskontolu olanlardan teknik olarak güçlü olanlar için alım sinyalleri oluşturuldu.

- Türkiye/BIST100, Brezilya/Bovespa ve Top40/Güney Afrika'da geçtiğimiz aylarda balaştığımız yukarı yön sinyalinin korunduğunu görüyoruz. BIST100'de 98700 kısa vadeli 94000 uzun vadeli olmak üzere yukarı sinyal korunuyor. Bovespa ve Top40 için ise zarar-kes seviyeleri sırasıyla 60 ve 44 binde yer alıyor.

- Dijital Yatırımcı Modelimize yeni bir değişken olarak risk profilini ekledik. Burada kredi riski ölçümleri için ülkelerin 5 yıllık dolar bazlı CDS kontratlarının primi, kur riski ölçümü için 1 aylık örtük kur volatilitesi kullanılmıştır. Bu iki ölçütün grup içi dağılıma bağlı olarak skorlaması yapılmış ve her bir ülke için ortalama skor belirlenmiştir. ,

- Burada amaç yabancı yatırımcı bakış açısıyla yatırımların getiri potansiyelinin yanı sıra risk algısını da ölçmektir. Buna ilaveten risk profilinin modele eklenmesiyle geriye dönük testlerde endeks performansları daha yüksek tutarlılıkla tahmin edilmiştir.



## MEVCUT SİNYALLER

	Skor	Trend	Sinyal	KAR/ZARAR	DURUM
Türkiye/BIST100	N.İskontolu	Pozitif	15 Dec 2016	30,32%	AÇIK
Brezilya/Bovespa	N.İskontolu	Pozitif	03/05/2017	-4,26%	AÇIK
G.Afrika/Top40	N.İskontolu	Pozitif	11/05/2017	-3,86%	AÇIK

## KAPATILAN POZİSYONLAR

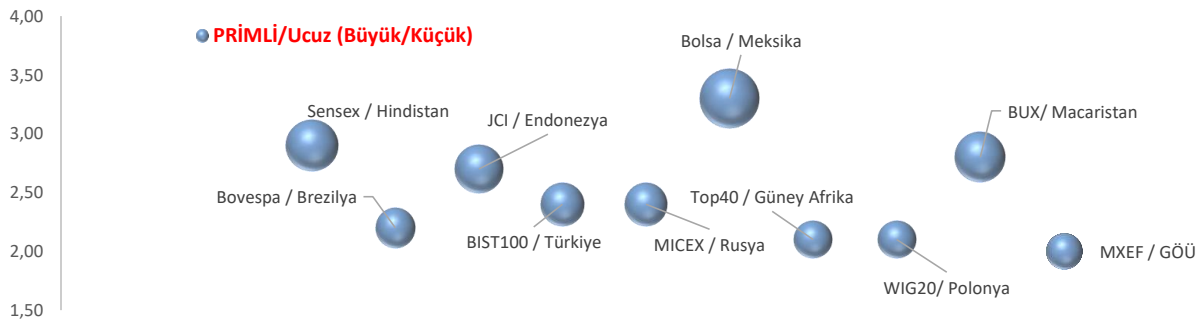
	Skor	Trend	Sinyal	KAR/ZARAR	Durum
Russia/Micex	N.Primli	Negatif	14 Şubat 17	12,30%	Karla kapatıldı.

Not: Değerleme sinyalleri otomatik olarak oluşmakta ve hisse senedi stratejisi yerine geçmemektedir.

	Ekonometrik Model	Reel Kur Modeli	Değerleme	Risk Profili	Teknik görünüm	SKOR
Sensex / Hindistan	4	2	3	2	NÖTR	NÖTR/İSKONTOLU
Bovespa / Brezilya	3	2	2	4	POS	NÖTR/İSKONTOLU
JCI / Endonezya	4	3	2	3	POS	NÖTR/PRİMLİ
BIST100 / Türkiye	4	2	2	3	POS	NÖTR/İSKONTOLU
MICEX / Rusya	4	2	2	3	NÖTR	NÖTR/İSKONTOLU
Bolsa / Meksika	3	4	3	3	POS	NÖTR/PRİMLİ
Top40 / Güney Afrika	2	4	1	4	POS	NÖTR/PRİMLİ
WIG20/ Polonya	2	4	1	2	NÖTR	İSKONTOLU
BUX/ Macaristan	3	4	2	2	NÖTR	NÖTR/İSKONTOLU
MXEF / GÖÜ	1	1	3	2	POS	İSKONTOLU

Notlandırma: 1 iskontolu, 2 nötr/primli, 3 for nötr/primli, 4 for primli

\* Risk profili notlandırması: 1 düşük risk, 2 düşük/orta risk, 3 orta/yüksek risk, 4 for yüksek risk



## Değerleme ve Hisse Senedi Performansları

Hisse senedi değerlemelerine bakıldığında, tarihsel ve karşılaştırmalı olarak yapılan iskontolara ek olarak analistlerin konsensüs HBK (Hisse Başına Kar) büyümesi tahminlerini de çalışmamıza dahil ettik. Tarihsel iskontolar ve EPS Büyüme beklentileri değişkenlerinin toplam notlandırma içerisindeki ağırlığı eşittir.

### Tarihsel Değerleme

04/07/2017	F/K 12M Beklentisi	Prim/İskonto 3 Yıllık Ort.	Prim/İskonto 10 Yıllık Ort.	EPS Büyüme Bek.	NOTLANDIRMA
Sensex / Hindistan	19,11	10,7%	24,5%	22,1%	NÖTR/PRİMLİ
Bovespa / Brezilya	11,76	-9,4%	16,7%	44,9%	NÖTR/İSKONTOLU
JCI / Endonezya	16,84	5,3%	11,0%	48,9%	NÖTR/PRİMLİ
BIST100 / Türkiye	9,34	-6,0%	-9,1%	14,3%	NÖTR/İSKONTOLU
MICEX / Rusya	6,40	1,7%	-25,6%	3,3%	NÖTR/İSKONTOLU
Bolsa / Meksika	18,39	-9,5%	9,2%	17,2%	NÖTR/İSKONTOLU
Top40 / Güney Afrika	11,01	-33,5%	-17,9%	71,9%	İSKONTOLU
WIG20/ Polonya	12,13	-4,9%	-1,3%	48,2%	NÖTR/İSKONTOLU
BUX/ Macaristan	11,21	-8,7%	3,5%	-10,3%	NÖTR/İSKONTOLU
MXEF/GÖÜ	12,59	2,7%	7,3%	22,6%	NÖTR/PRİMLİ

### Karşılaştırmalı Analiz (Gelişmekte Olan Ülke Endeksine Göre)

04/07/2017	Prim/İskonto (GÖÜ'ye göre)	Prim/İskonto (GÖÜ'ye göre) 3 Yıllık Ort.	Prim/İskonto (GÖÜ'ye göre) 10 Yıllık Ort.	NOTLANDIRMA
Sensex / Hindistan	0,52	40,5%	36,1%	PRİMLİ
Bovespa / Brezilya	-0,07	5,3%	1,5%	NÖTR/İSKONTOLU
JCI / Endonezya	0,34	30,1%	23,0%	NÖTR/PRİMLİ
BIST100 / Türkiye	-0,26	-19,0%	-17,1%	İSKONTOLU
MICEX / Rusya	-0,49	-48,9%	-43,0%	İSKONTOLU
Bolsa / Meksika	0,46	65,4%	45,7%	PRİMLİ
Top40 / Güney Afrika	-0,13	34,9%	12,9%	NÖTR/PRİMLİ
WIG20/ Polonya	-0,04	3,7%	1,0%	NÖTR/İSKONTOLU
BUX/ Macaristan	-0,11	0,1%	-10,3%	İSKONTOLU

04/07/2017	F/K 12M Beklentisi	F/K	PD/DD	PD/FAVÖK	PD/SATIŞ	ROE 12M Beklentisi	ROE
Sensex / Hindistan	19,11	23,33	2,97	10,20	2,68	13,79	13,32
Bovespa / Brezilya	11,76	17,04	1,53	5,48	1,15	11,74	8,61
JCI / Endonezya	16,84	25,08	2,48	9,32	2,15	18,47	10,06
BIST100 / Türkiye	9,34	10,67	1,38	6,14	1,10	14,00	13,94
MICEX / Rusya	6,40	6,61	0,70	3,16	0,77	7,61	10,87
Bolsa / Meksika	18,39	21,54	2,75	6,51	1,52	16,79	13,43
Top40 / Güney Afrika	11,01	18,93	2,07	9,83	1,80	14,41	14,43
WIG20/ Polonya	12,13	17,98	1,32	4,80	1,07	8,98	7,62
BUX/ Macaristan	11,21	10,05	1,52	4,50	1,17	9,70	15,53
MXEF/GÖÜ	12,59	15,44	1,65	7,15	1,33	9,43	11,61

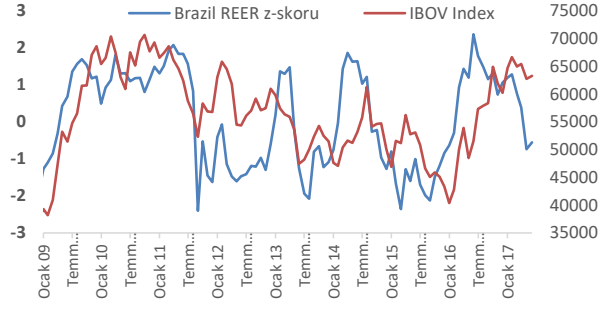
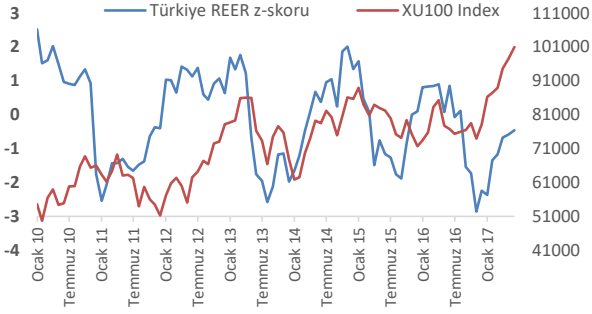
Kaynak: Ak Yatırım, Bloomberg

## Reel Kurlar ve Hisse senedi Piyasaları

### İSKONTOLU/UZUN VADELİ YÜKSEK POTANSİYELE SAHİP OLANLAR (TÜRKİYE VE MEKSİKA)

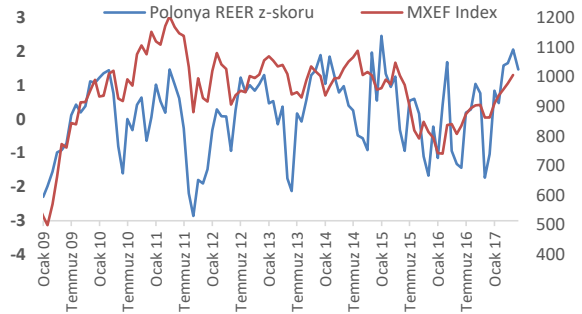
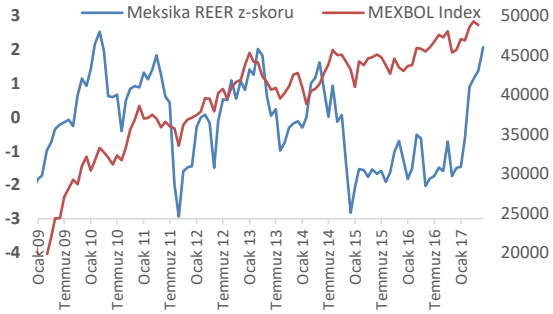
Reel kur bazlı modelimizde ülke reel kurlarının endeksler ile olan uzun vadeli ilişkisine bağlı olarak notlandırma yapılmış ve endekslerin potansiyeli saptanmıştır.

Modelimiz **Türkiye ve Brezilya senedi endekslerinin** orta-uzun vadeli yüksek primlenme potansiyeline sahip olduğuna işaret ediyor.



### PRİMLİ/ UZUN VADELİ DÜŞÜK POTANSİYELE SAHİP OLANLAR

**Meksika, Polonya**, orta uzun vadeli olarak düşük primlenme potansiyeline sahip görünüyor.



## Regresyon Modelleri (Kısa Vadeli Bakış)

500'den fazla makro ve finansal değişkene sahip veritabanından ekonometrik metodlar ile seçilen değişkenler vasıtasıyla her bir endeks için model kurulmuştur. Bu vesileyle endeks değerlerinin model değerden sapması (residual) değerlendirilerek endeksler için "iskontolu" veya "primli" değerlendirilmesi yapılmaktadır. Aşağıdaki grafiklerde yer alan mavi seriler bu açıdan değerlendirilmesi, mavi serinin zirvelerde olması, o endeks için düzeltme vaktinin yaklaştığına işaret etmektedir. Mavi seride dip noktalara ulaşılması ise endeksin "iskontolu" görünümüne sahip olduğuna işaret etmektedir.

Güncel sonuçlara bakıldığında, kısa vadeli regresyon modelleri BIST100, JCI/Endonezya, MICEX ve Sensex için kısa vadeli düzeltme riskinin

04/07/2017	R-Sq	ALT BANT	ORTA	ÜST BANT	SON	NOTLANDIRMA
Sensex / Hindistan	93%	-1500	250	2000	3050	PRİMLİ
Bovespa / Brezilya	75%	-5000	1000	7000	2316	NÖTR/PRİMLİ
JCI / Endonezya	94%	-400	0	400	825	PRİMLİ
BIST100 / Türkiye	93%	-5000	500	6000	12573	PRİMLİ
MICEX / Rusya	73%	-200	-25	150	192	PRİMLİ
Bolsa / Meksika	95%	-2900	0	2900	2108	NÖTR/PRİMLİ
Top40 / Güney Afri	93%	-2500	500	3500	-1815	NÖTR/İSKONTOLU
WIG20/ Polonya	86%	-240	0	240	-16	NÖTR/İSKONTOLU
BUX/ Macaristan	92%	-2000	0	2000	1006	NÖTR/PRİMLİ
MXEF/GÖÜ	67%	85	-8	-100	30	İSKONTOLU

## Risk Profili (Kredi ve Kur Riski)

Dijital Yatırımcı skorumda ülke para birimlerinin kur riski ve ülke borçlanma araçlarının kredi riski önemli bir girdi olarak kabul edilmektedir. Burada kredi riski ölçümleri için ülkelerin 5 yıllık dolar bazlı CDS kontratlarının primi, kur riski ölçümü için 1 aylık örtük kur volatilitesi kullanılmıştır. Bu iki ölçütün grup içi dağılıma bağlı olarak skorlaması yapılmış ve her bir ülke için ortalama skor belirlenmiştir. Ülkeler risk sınıflarına göre skorlanmıştır.

04/07/2017	CDS (bps)	KUR VOL (1M imp %)	SKOR
Hindistan	86	5,3	DÜŞÜK RİSK
Brezilya	241	13,1	YÜKSEK RİSK
Endonezya	118	5,4	ORTA/YÜKSEK RİSK
Türkiye	197	11,1	ORTA/YÜKSEK RİSK
Rusya	170	13,7	ORTA/YÜKSEK RİSK
Meksika	113	12,1	ORTA/YÜKSEK RİSK
Güney Afrika	200	15,7	YÜKSEK RİSK
Polonya	60	9,5	DÜŞÜK RİSK
Macaristan	109	8,0	DÜŞÜK RİSK
MSCI GÖÜ	95	7,8	DÜŞÜK RİSK

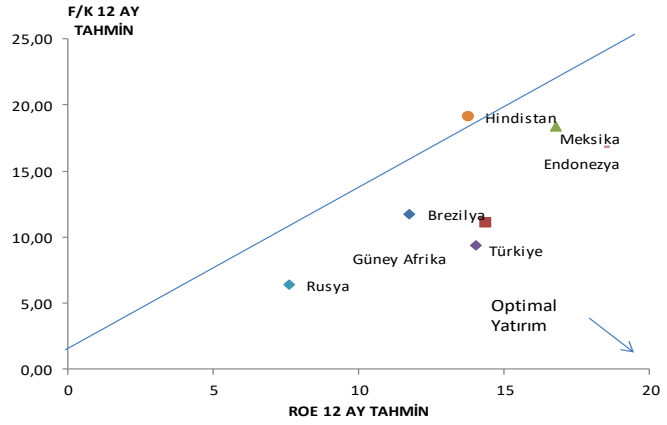
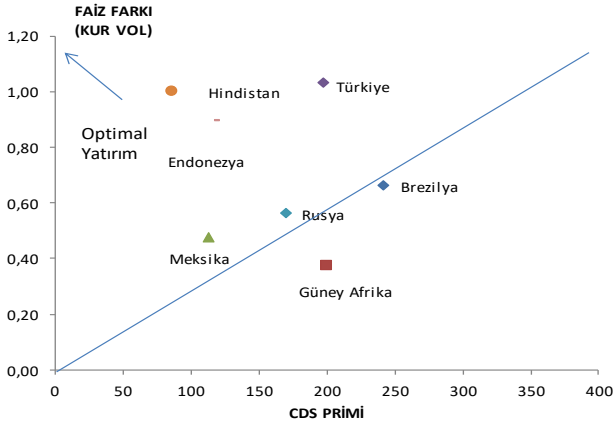
# Makro Göstergeler

## Bono ve Döviz Piyasaları

04/07/2017	CARRY	CDS (bps)	KUR VOL (1M imp %)	LIBOR (1 AY %)	GETİRİ EĞRİSİ EĞİMİ	SWAP EĞRİSİ EĞİMİ
Hindistan	1,00	86	5,3	6,5	POZİTİF	POZİTİF
Brezilya	0,66	241	13,1	9,9	POZİTİF	POZİTİF
Endonezya	0,90	118	5,4	6,1	POZİTİF	POZİTİF
Türkiye	1,03	197	11,1	12,7	NEGATİF	NEGATİF
Rusya	0,56	170	13,7	8,9	NEGATİF	NEGATİF
Meksika	0,48	113	12,1	7,0	POZİTİF	NEGATİF
Güney Afrika	0,37	200	15,7	7,1	POZİTİF	POZİTİF
Polonya	0,05	60	9,5	1,7	POZİTİF	POZİTİF
Macaristan	-0,13	109	8,0	0,2	POZİTİF	POZİTİF

## Makro ve Finansal Değişkenler

04/07/2017	GSYİH yoy (%)	TÜFE yoy(%)	İşsizlik (%)	CA/GSYİH (%)	Bütçe/GDP(%)	2 Yıl Tahvil Faizi	10 Yıl Tahvil Faizi	2 Yıl Reel Faiz (%)
Hindistan	5,30	1,09	8,40	-0,67	-3,52	6,43	6,55	2,20
Brezilya	-0,35	3,60	8,20	-1,03	-8,68	9,01	10,49	4,89
Endonezya	5,01	4,37	-	-1,52	-1,93	6,60	6,90	2,25
Türkiye	3,09	10,90	11,70	-3,89	-1,71	11,20	10,33	1,90
Rusya	0,50	4,10	5,20	2,36	-3,37	8,02	7,72	3,87
Meksika	2,76	6,16	3,56	-0,62	-0,66	6,74	6,86	1,94
Güney Afrika	-0,70	5,40	27,70	-2,10	-3,83	8,80	7,56	3,38
Polonya	4,00	1,50	7,40	1,18	-2,40	1,86	3,28	-0,17
Macaristan	4,20	2,10	4,40	4,56	-1,80	0,51	3,17	-2,19



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A key element of our rating system is the benchmarking of the 12-month expected return against the cost of equity. We apply a required rate of return for each stock, calculated on the basis of our assumed risk-free rate and equity risk premium. A stock is normally assigned an Outperform rating if the implied return over the next 12 months exceeds the required rate of return (cost of equity) by at least 10 percentage points for our larger-cap stock coverage, or by 15 percentage points for the small-cap group. As the average potential upside of the stocks in our coverage may be considerably higher or lower than the average cost of equity, we also filter stocks according to their potential upside with respect to other stocks under coverage, with the practical aim of attaching an Outperform rating to the top group (generally 30-50% of the companies under our coverage), a Neutral rating for the next 40-50% and an Underperform rating to the lowest group (no less than 10%, and typically between 10-20% of the coverage group). The expected returns on some stocks may fall outside the range of the applicable rating category, due to movements in market prices and other short-term volatility or trading patterns, or analyst discretion. While temporary deviations from the specified ranges are permitted, they would subsequently become subject to review. Note too that the analyst's short-term view may occasionally diverge from the stock's longer-term fundamental rating.

**Outperform.** An outperform rating conveys an expectation that the stock will outperform the BIST-100 Index (XU100) within the next 6 to 12 months.

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