# Table Of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Earnings</td>
<td>1-4</td>
</tr>
<tr>
<td>Forward Revenues</td>
<td>5-8</td>
</tr>
<tr>
<td>Forward Earnings Growth</td>
<td>9-12</td>
</tr>
<tr>
<td>Forward Revenue Growth</td>
<td>13-16</td>
</tr>
<tr>
<td>Valuation</td>
<td>17-20</td>
</tr>
<tr>
<td>Forward Profit Margin</td>
<td>21-24</td>
</tr>
<tr>
<td>Index Price</td>
<td>25-28</td>
</tr>
</tbody>
</table>
* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

---

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
**Figure 3.**

MSCI FORWARD EARNINGS PER SHARE*
(indexed to 0 at 1-19-2006)

- Greece (-95.5)
- Ireland (-55.2)
- Italy (-33.3)
- Portugal (-53.1)
- Spain (-3.6)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

**Figure 4.**

MSCI FORWARD EARNINGS PER SHARE*
(indexed to 0 at 1-19-2006)

- Brazil (35.3)
- China (154.2)
- India (213.8)
- Russia (43.2)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
MSCI FORWARD EARNINGS PER SHARE* (indexed to 0 at 1-19-2006)

- Brazil (35.3)
- China (154.2)
- India (213.8)
- Indonesia (191.6)
- Mexico (92.8)
- South Africa (175.5)
- Turkey (302.0)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

MSCI FORWARD EARNINGS PER SHARE* (indexed to 0 at 1-19-2006)

- Israel (16.4)
- Korea (60.7)
- Singapore (42.5)
- Taiwan (29.1)
- Thailand (16.7)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
**Figure 7.**

MSCI FORWARD EARNINGS PER SHARE*
(indexed to 0 at 1-19-2006)

- Belgium (-34.3)
- Netherlands (35.6)
- Norway (7.1)
- Sweden (72.1)
- Switzerland (20.8)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

**Figure 8.**

MSCI FORWARD EARNINGS PER SHARE*
(indexed to 0 at 1-19-2006)

- Australia (16.5)
- Brazil (35.3)
- Canada (46.4)
- Mexico (92.8)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
MSCI FORWARD REVENUES PER SHARE*
(indexed to 0 at 1-19-2006)

- All Country World (41.8)
- Emerging Markets (89.3)
- EMU (9.3)
- Japan (1.6)
- UK (21.0)
- US (66.7)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

MSCI FORWARD REVENUES PER SHARE*
(indexed to 0 at 1-19-2006)

- France (9.0)
- Germany (22.8)
- Italy (15.6)
- Spain (22.3)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Figure 11.
MSCI FORWARD REVENUES PER SHARE*  
(indexed to 0 at 1-19-2006)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

Figure 12.
MSCI FORWARD REVENUES PER SHARE*  
(indexed to 0 at 1-19-2006)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
**Figure 13.**

MSCI FORWARD REVENUES PER SHARE*  
(indexed to 0 at 1-19-2006)

- Brazil (102.5)  
- China (98.8)  
- India (316.8)  
- Indonesia (179.5)  
- Mexico (162.7)  
- South Africa (132.8)  
- Turkey (367.8)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.  
Source: Thomson Reuters I/B/E/S.

**Figure 14.**

MSCI FORWARD REVENUES PER SHARE*  
(indexed to 0 at 1-19-2006)

- Israel (-22.0)  
- Korea (147.4)  
- Singapore (13.9)  
- Taiwan (88.5)  
- Thailand (106.0)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.  
Source: Thomson Reuters I/B/E/S.
MSCI FORWARD REVENUES PER SHARE*
(indexed to 0 at 1-19-2006)

Figure 15.

- Belgium (-36.6)
- Netherlands (-2.0)
- Norway (2.2)
- Sweden (40.0)
- Switzerland (-1.5)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

MSCI FORWARD REVENUES PER SHARE*
(indexed to 0 at 1-19-2006)

Figure 16.

- Australia (15.4)
- Brazil (102.5)
- Canada (45.4)
- Mexico (162.7)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
MSCI FORWARD EARNINGS GROWTH*
(next 52 weeks, percent)

Growth capped at 30% due to extreme values.

-30  -20  -10   0   10   20   30   40


-30  -20  -10   0   10   20   30   40

All Country World ** (9.3)
Emerging Markets (14.0)
EMU (10.3)
Japan (12.6)
United Kingdom (3.2)
United States (8.7)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$. Source: Thomson Reuters I/B/E/S.

MSCI FORWARD EARNINGS GROWTH*
(next 52 weeks, percent)

Growth capped at 40% due to extreme values.

-30  -20  -10   0   10   20   30   40   50


-30  -20  -10   0   10   20   30   40   50

France ** (10.7)
Germany (12.7)
Italy (6.3)
Spain (10.7)
United Kingdom (3.2)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$. Source: Thomson Reuters I/B/E/S.
MSCI FORWARD EARNINGS GROWTH* (next 52 weeks, percent)

Growth capped at 40% due to extreme values.

Greece ** (8.2)
Ireland (4.0)
Italy (6.3)
Portugal (31.8)
Spain (10.7)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in USS.
Source: Thomson Reuters I/B/E/S.

MSCI FORWARD EARNINGS GROWTH* (next 52 weeks, percent)

Growth capped at 50% due to extreme values.

Brazil ** (11.3)
China (11.6)
India (23.4)
Russia (-2.0)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in USS.
Source: Thomson Reuters I/B/E/S.
**MSCI FORWARD EARNINGS GROWTH**

(next 52 weeks, percent)

- Brazil ** (11.3)
- China (11.6)
- India (23.4)
- Indonesia (10.1)
- Mexico (16.8)
- South Africa (22.9)
- Turkey (32.7)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.

** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

---

Growth capped at 50% due to extreme values.

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.

** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
**MSCI FORWARD EARNINGS GROWTH**  
(next 52 weeks, percent)

Growth capped at 50% due to extreme values.

- Belgium ** (-0.9)
- Netherlands (10.3)
- Norway (12.1)
- Sweden (3.3)
- Switzerland (7.6)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.  
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.  
Source: Thomson Reuters I/B/E/S.

---

**MSCI FORWARD EARNINGS GROWTH**  
(next 52 weeks, percent)

Growth capped at 45% due to extreme values.

- Australia ** (2.7)
- Brazil (11.3)
- Canada (5.6)
- Mexico (16.8)

* Short-Term Earnings Growth (STEG) is forward consensus expected earnings growth over next 52 weeks.  
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.  
Source: Thomson Reuters I/B/E/S.
Forward Revenue Growth

Figure 25.

MSCI FORWARD REVENUE GROWTH*  
(next 52 weeks, percent)

- Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
- All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
- Source: Thomson Reuters I/B/E/S.

Figure 26.

MSCI FORWARD REVENUE GROWTH*  
(next 52 weeks, percent)

- Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
- All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
- Source: Thomson Reuters I/B/E/S.
Figure 27.

MSCI FORWARD REVENUE GROWTH*
(next 52 weeks, percent)

- Greece ** (-0.4)
- Ireland (4.2)
- Italy (1.9)
- Portugal (7.3)
- Spain (2.1)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in USS.
Source: Thomson Reuters I/B/E/S.

Figure 28.

MSCI FORWARD REVENUE GROWTH*
(next 52 weeks, percent)

- Brazil ** (5.8)
- China (8.5)
- India (9.3)
- Russia (-0.4)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in USS.
Source: Thomson Reuters I/B/E/S.
**Figure 29.**

MSCI FORWARD REVENUE GROWTH*
(next 52 weeks, percent)

- Brazil ** (5.8)
- China (8.5)
- India (9.3)
- Indonesia (6.0)
- Mexico (5.1)
- South Africa (9.8)
- Turkey (12.6)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

---

**Figure 30.**

MSCI FORWARD REVENUE GROWTH*
(next 52 weeks, percent)

- Israel ** (5.6)
- Korea (5.9)
- Singapore (4.5)
- Taiwan (4.7)
- Thailand (2.3)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Forward Revenue Growth

Figure 31.

MSCI FORWARD EARNINGS GROWTH*
(next 52 weeks, percent)

**Belgium ** (2.9)
Netherlands (4.9)
Norway (5.0)
Sweden (1.0)
Switzerland (-1.2)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

Figure 32.

MSCI FORWARD REVENUE GROWTH*
(next 52 weeks, percent)

* Short-Term Revenues Growth (STRG) is forward consensus expected revenues growth over next 52 weeks.
** All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
MSCI FORWARD P/E*

P/E capped at 25 due to extreme values.

- All Country World (15.5)
- Emerging Markets (12.0)
- EMU (13.2)
- Japan (12.6)
- United Kingdom (11.9)
- United States (18.0)

MSCI FORWARD P/E*

- France (13.5)
- Germany (12.7)
- Italy (10.9)
- Spain (11.2)
- United Kingdom (11.9)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
MSCI FORWARD P/E*

- Greece (11.7)
- Ireland (15.5)
- Italy (10.9)
- Portugal (17.2)
- Spain (11.2)

P/E capped at 30 due to extreme values.

*All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

MSCI FORWARD P/E*

- Brazil (12.6)
- China (11.9)
- India (17.3)
- Russia (5.8)

*All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Valuation

Figure 39.

MSCI FORWARD P/E*

Belgium (14.5)
Netherlands (16.6)
Norway (12.3)
Sweden (15.2)
Switzerland (17.3)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

Figure 40.

MSCI FORWARD P/E*

Australia (16.4)
Brazil (12.6)
Canada (14.2)
Mexico (13.5)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
**Forward Profit Margin**

*MSCI FORWARD PROFIT MARGIN*

(Percent)

- All MSCI regions in US$ except EMU in euros.
- All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

---

*All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.*

Source: Thomson Reuters I/B/E/S.
Figure 43.

MSCI FORWARD PROFIT MARGIN*
(percent)

Greece (7.7)
Ireland (8.8)
Italy (6.0)
Portugal (4.1)
Spain (10.3)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

Figure 44.

MSCI FORWARD PROFIT MARGIN*
(percent)

Brazil (9.0)
China (4.6)
India (10.3)
Russia (16.1)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
**Forward Profit Margin**

**Figure 45.**

<table>
<thead>
<tr>
<th>Year</th>
<th>MSCI FORWARD PROFIT MARGIN* (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Brazil (9.0)</td>
</tr>
<tr>
<td>2007</td>
<td>China (4.6)</td>
</tr>
<tr>
<td>2008</td>
<td>India (10.3)</td>
</tr>
<tr>
<td>2009</td>
<td>Indonesia (16.0)</td>
</tr>
<tr>
<td>2010</td>
<td>Mexico (6.5)</td>
</tr>
<tr>
<td>2011</td>
<td>South Africa (15.5)</td>
</tr>
<tr>
<td>2012</td>
<td>Turkey (9.5)</td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
</tr>
</tbody>
</table>

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.

**Figure 46.**

<table>
<thead>
<tr>
<th>Year</th>
<th>MSCI FORWARD PROFIT MARGIN* (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Israel (21.2)</td>
</tr>
<tr>
<td>2007</td>
<td>Korea (6.8)</td>
</tr>
<tr>
<td>2008</td>
<td>Singapore (17.9)</td>
</tr>
<tr>
<td>2009</td>
<td>Taiwan (7.0)</td>
</tr>
<tr>
<td>2010</td>
<td>Thailand (8.2)</td>
</tr>
<tr>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
</tr>
</tbody>
</table>

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.

Source: Thomson Reuters I/B/E/S.
Forward Profit Margin

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Figure 49.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

- All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
- Source: Thomson Reuters I/B/E/S.

Figure 50.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

- All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
- Source: Thomson Reuters I/B/E/S.
Index Price

Figure 51.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

- Greece (-96.6)
- Ireland (-47.8)
- Italy (-45.6)
- Portugal (-41.6)
- Spain (-15.6)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

Figure 52.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

- Brazil (134.4)
- China (186.9)
- India (238.4)
- Russia (-17.1)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Index Price

Figure 55.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

-80 -60 -40 -20 0 20 40 60 80 100 120


Belgium (-21.9)
Netherlands (76.0)
Norway (20.6)
Sweden (77.7)
Switzerland (36.6)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.

Figure 56.

MSCI INDEX PRICE*
(weekly, indexed to 0 at 12-31-2005)

-40 -20 0 20 40 60 80 100 120 140 160 180


Australia (33.0)
Brazil (134.4)
Canada (48.0)
Mexico (110.0)

* All MSCI regions in US$ except EMU in euros. All MSCI countries in local currency except Peru and Russia in US$.
Source: Thomson Reuters I/B/E/S.
Copyright (c) Yardeni Research, Inc. 2020. All rights reserved. The information contained herein has been obtained from sources believed to be reliable, but is not necessarily complete and its accuracy cannot be guaranteed. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness, or correctness of the information and opinions contained herein. The views and the other information provided are subject to change without notice. All reports and podcasts posted on www.yardeni.com, blog.yardeni.com, and YRI’s Apps are issued without regard to the specific investment objectives, financial situation, or particular needs of any specific recipient and are not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. Past performance is not necessarily a guide to future results. Company fundamentals and earnings may be mentioned occasionally, but should not be construed as a recommendation to buy, sell, or hold the company’s stock. Predictions, forecasts, and estimates for any and all markets should not be construed as recommendations to buy, sell, or hold any security—including mutual funds, futures contracts, and exchange traded funds, or any similar instruments.

The text, images, and other materials contained or displayed on any Yardeni Research, Inc. product, service, report, email or website are proprietary to Yardeni Research, Inc. and constitute valuable intellectual property. No material from any part of www.yardeni.com, blog.yardeni.com, and YRI’s Apps may be downloaded, transmitted, broadcast, transferred, assigned, reproduced or in any other way used or otherwise disseminated in any form to any person or entity, without the explicit written consent of Yardeni Research, Inc. All unauthorized reproduction or other use of material from Yardeni Research, Inc. shall be deemed willful infringement(s) of this copyright and other proprietary and intellectual property rights, including but not limited to, rights of privacy. Yardeni Research, Inc. expressly reserves all rights in connection with its intellectual property, including without limitation the right to block the transfer of its products and services and/or to track usage thereof, through electronic tracking technology, and all other lawful means, now known or hereafter devised. Yardeni Research, Inc. reserves the right, without further notice, to pursue to the fullest extent allowed by the law any and all criminal and civil remedies for the violation of its rights.

The recipient should check any email and any attachments for the presence of viruses. Yardeni Research, Inc. accepts no liability for any damage caused by any virus transmitted by this company’s emails, website, blog and Apps. Additional information available on request.