Disclosures

Disclosures for universe of: Nicole Miller Regan, Erinn Murphy, Mike Olson

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2. I or a household member is an officer, director, or advisory board member of the following companies: none

3. I have received compensation within the past 12 months from the following companies: none

4. Piper Jaffray or its affiliates beneficially own 1% or more of any class of common equities of the following companies: BOJA, SFIX

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6. Piper Jaffray expects to receive or intends to seek compensation for investment banking services from the following companies in the next 3 months: DFRG, ZOES

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Note: Piper Jaffray and/or its employees (other than the analyst who follows Glu Mobile Inc.) own securities of Glu Mobile Inc. that were acquired prior to the IPO of Glu Mobile Inc.
What Is a Stock Analyst?

Intro To Primary & Secondary Market Research

Taking Stock With Teens – Primary Market Research

What You Told Us

Hot Trends In Fashion, Food, & Electronics

Using Consumer Insights To Pick Stocks
What Is A Stock Analyst?

**Detective & Student:**
Research companies to understand business structure

**Mathematician/Statistician:**
Create financial models to predict future performance

**Investor:**
Estimate value of companies “per share”
Compare to stock price per share
Make buy, hold or sell recommendation

**Journalist:**
Present findings & recommendations in reports for investors
**Primary & Secondary Market Research**

**PRIMARY MARKET RESEARCH**
- Primary research is any type of research that you go out and collect yourself
- Examples include surveys, interviews and observations

**SECONDARY MARKET RESEARCH**
- Secondary research involves the summary, collation and/or synthesis of *existing* research
- Examples include prior research reports, newspapers, magazines and government statistics
How We Do Our Primary & Secondary Research

1. Talk to company management, industry experts
2. Review financial results, future strategies
3. Read magazines, newspapers, trade journals
4. Attend industry-related events
5. Keep up on trends, follow trend lifecycles
6. Visit stores, talk to customers and associates
7. Survey consumers about their preferences and shopping behaviors
Taking Stock With Teens – Primary Market Research

National Survey Of Teens Measuring:

- Brand Preferences
- Spending Trends
- Shopping Characteristics

**ACTIVITY:**
Wide Scale Focus Group

**OBJECTIVE:**
Understand Youth Spending
Taking Stock With Teens – Survey Framework & Demographics

35th Semi-Annual Proprietary Teen Research Project

National survey of teens measuring:
• Behaviors & Priorities
• Capacity & Intentions
• Brand Preferences

6,000 Total Responses

16.4 Average Age

40% Part-Time Employed

Source: Piper Jaffray & Co.
Taking Stock With Teens – Factors We Consider

MACRO-ECONOMIC FACTORS

Fuel Costs

INDUSTRY

Foreign Exchange Rates

COMPANY

Interest Rates

Home Values

Labor Costs
Taking Stock With Teens – Factors We Consider

MACRO-ECONOMIC FACTORS

INDUSTRY

COMPANY

- Raw Materials; Inputs
- Industry Labor Costs
- Weather; Seasonality
- Selling Prices
Taking Stock With Teens – Factors We Consider

**MACRO-ECONOMIC FACTORS**

**INDUSTRY**

**COMPANY**

Gender Targets

Clearance, Markdowns

Geographic Exposure

Management Comments

On Trend or Off Trend?
Teen Fashion Spending – Estimating Market Size

Researchers call this “total addressable market” or TAM

- Apparel
- Shoes
- Accessories

$73 billion \times 28\text{ million} \times \$2,600/\text{person} = \$73 \text{ billion}$

- Apparel: $73\text{ billion} \times 38\% = \$28\text{ billion}$
Highlights From Spring 2018

1. Teen spending is up year-over-year
2. Food spending is at its peak (24% of wallet)
3. Beauty & video games continue to gain wallet share
4. Athletic trend remains strong led by adidas
5. Teen intent to buy iPhone reaches high (84% will choose iPhone as next phone)
### What Is In A Teen’s Wallet Today?

**All Upper-Income Teens**

<table>
<thead>
<tr>
<th>Budget Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Needs</td>
<td>19%</td>
</tr>
<tr>
<td>Electronics, Cars, &amp; Other</td>
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</tr>
<tr>
<td>Selfie Budget</td>
<td>38%</td>
</tr>
<tr>
<td>Clothing, Accessories, Personal Care, &amp; Shoes</td>
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<tr>
<td>Social Budget</td>
<td>43%</td>
</tr>
<tr>
<td>Food, Video Games, Music, Movies, Events, &amp; Books</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Piper Jaffray & Co.*

**Chick-fil-A is favorite restaurant for teens followed by Starbucks**

**Beauty continues to take a greater share of wallet for women—Sephora & Ulta are top two beauty destinations**

**Video games continue to gain share of male wallets**
Top Spending Categories For Teens
All Upper-Income Teens

Male’s Wallet Share

1. Food 24%
2. Clothing 16%
3. Video Games 13%

Female’s Wallet Share

1. Clothing 25%
2. Food 25%
3. Personal Care/Accessories 17%

Source: Piper Jaffray & Co.
Amazon As Top Website For Teens

All Upper-Income Teens

<table>
<thead>
<tr>
<th>Rank</th>
<th>Fall 2016</th>
<th>%</th>
<th>Rank</th>
<th>Spring 2017</th>
<th>%</th>
<th>Rank</th>
<th>Fall 2017</th>
<th>%</th>
<th>Rank</th>
<th>Spring 2018</th>
<th>%</th>
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<td>1</td>
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<td>Nike</td>
<td>5%</td>
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<td>Nike</td>
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<td>2</td>
<td>Nike</td>
<td>6%</td>
</tr>
<tr>
<td>3</td>
<td>American Eagle</td>
<td>4%</td>
<td>3</td>
<td>American Eagle</td>
<td>5%</td>
<td>3</td>
<td>American Eagle</td>
<td>5%</td>
<td>3</td>
<td>American Eagle</td>
<td>4%</td>
</tr>
<tr>
<td>4</td>
<td>eBay</td>
<td>3%</td>
<td>4</td>
<td>Forever 21</td>
<td>3%</td>
<td>4</td>
<td>ebay</td>
<td>3%</td>
<td>4</td>
<td>Urban Outfitters</td>
<td>3%</td>
</tr>
<tr>
<td>5</td>
<td>Forever 21</td>
<td>2%</td>
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<td>eBay</td>
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<td>Forever 21</td>
<td>3%</td>
<td>5</td>
<td>Forever 21</td>
<td>3%</td>
</tr>
<tr>
<td>6</td>
<td>Urban Outfitters</td>
<td>2%</td>
<td>6</td>
<td>Urban Outfitters</td>
<td>2%</td>
<td>6</td>
<td>Urban Outfitters</td>
<td>2%</td>
<td>6</td>
<td>PacSun</td>
<td>2%</td>
</tr>
<tr>
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<td>Nordstrom</td>
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<td>7</td>
<td>Victoria's Secret</td>
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<td>7</td>
<td>Fashion Nova</td>
<td>2%</td>
<td>7</td>
<td>ebay</td>
<td>2%</td>
</tr>
<tr>
<td>8</td>
<td>Victoria's Secret</td>
<td>1%</td>
<td>8</td>
<td>lululemon</td>
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<td>8</td>
<td>lululemon</td>
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<td>lululemon</td>
<td>2%</td>
</tr>
<tr>
<td>9</td>
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<td>1%</td>
<td>9</td>
<td>PacSun</td>
<td>1%</td>
<td>9</td>
<td>PacSun</td>
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<td>2%</td>
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<tr>
<td></td>
<td>PacSun</td>
<td>1%</td>
<td>10</td>
<td>Zumiez</td>
<td>1%</td>
<td>10</td>
<td>Supreme</td>
<td>1%</td>
<td>10</td>
<td>Supreme</td>
<td>1%</td>
</tr>
</tbody>
</table>

>70% Of Softlines Dollar Growth In North America

Source: Piper Jaffray & Co.
### Seeing Strong Signs Of 1990s & Streetwear Cycle

**Upper-Income Favorite Apparel Brand (All Teens)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Fall 2016</th>
<th>% Rank</th>
<th>Spring 2017</th>
<th>% Rank</th>
<th>Fall 2017</th>
<th>% Rank</th>
<th>Spring 2018</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nike</td>
<td>29%</td>
<td>Nike</td>
<td>31%</td>
<td>Nike</td>
<td>23%</td>
<td>Nike</td>
<td>23%</td>
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<tr>
<td>2</td>
<td>American Eagle</td>
<td>9%</td>
<td>American Eagle</td>
<td>10%</td>
<td>American Eagle</td>
<td>11%</td>
<td>American Eagle</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Forever 21</td>
<td>5%</td>
<td>Forever 21</td>
<td>5%</td>
<td>Adidas</td>
<td>4%</td>
<td>Adidas</td>
<td>6%</td>
</tr>
<tr>
<td>4</td>
<td>Ralph Lauren</td>
<td>4%</td>
<td>lululemon</td>
<td>3%</td>
<td>Forever 21</td>
<td>4%</td>
<td>Forever 21</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>Urban Outfitters</td>
<td>3%</td>
<td>H&amp;M</td>
<td>3%</td>
<td>Hollister</td>
<td>4%</td>
<td>Urban Outfitters</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>H&amp;M</td>
<td>3%</td>
<td>Adidas</td>
<td>3%</td>
<td>PacSun</td>
<td>3%</td>
<td>PacSun</td>
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<tr>
<td>7</td>
<td>PacSun</td>
<td>2%</td>
<td>Hollister</td>
<td>2%</td>
<td>lululemon</td>
<td>3%</td>
<td>Supreme</td>
<td>3%</td>
</tr>
<tr>
<td>8</td>
<td>Adidas</td>
<td>2%</td>
<td>Urban Outfitters</td>
<td>2%</td>
<td>H&amp;M</td>
<td>3%</td>
<td>H&amp;M</td>
<td>3%</td>
</tr>
<tr>
<td>9</td>
<td>Vineyard Vines</td>
<td>2%</td>
<td>Vans</td>
<td>2%</td>
<td>Urban Outfitters</td>
<td>3%</td>
<td>lululemon</td>
<td>3%</td>
</tr>
<tr>
<td>10</td>
<td>Victoria’s Secret</td>
<td>2%</td>
<td>PacSun</td>
<td>2%</td>
<td>Ralph Lauren</td>
<td>2%</td>
<td>10 Gucci</td>
<td>2%</td>
</tr>
</tbody>
</table>

- adidas doubles its mindshare from 3% to 6% as it moves from No. 5 to No. 3
- Nike, while still No. 1, moves from 31% share as preferred apparel brand to 23%
- Urban Outfitters returns to the top-5; believe this is reflection of current fashion cycle
- Supreme moves higher within top-10 (No. 7); Gucci makes its debut in top-10
66% of females prefer an athletic brand of footwear, up from 63% last year & down from 67% last fall (below)

84% of males prefer an athletic brand of footwear, down from 86% last year and last fall
Brands That Made Significant Upwards Moves In Top 20

Supreme
- Improved rank and mindshare sequentially after debuting last Fall
- No. 5 up & coming male brand (No. 7 in Fall);
- Remains No. 10 preferred website vs. last Fall (debuted at No. 10)
- Street brand with minority investment from The Carlyle Group

Calvin Klein
- Remained No. 10 for avg. income handbags after debuting last Fall
- GIII is PVH’s licensee for handbags; ~$130-$150M category

Champion
- Moved from No. 44 upper-income male apparel brand last Fall to No. 10 (tied with Vineyard Vines); No. 40 to No. 25 among avg. income

GUCCI
- Jumped from No. 15 preferred apparel brand last Fall to No. 10
- Moved from No. 10 to No. 6 preferred apparel brand among males
- No. 4 preferred handbag among both income groups

TOMMY HILFIGER
- Tommy Hilfiger (~43% of PVH sales) saw strength among males
- Remained in top 20 as preferred apparel brand for males after debuting there for first time last Fall – ranked No. 15 in upper income and No. 12 in avg. income
Beauty Spending For Teens Represents 18% Of Wallet

Beauty Wallet Segmentation (All Female Teens)

- Cosmetics share returns to ~8% after falling to 7% in Fall 2017
- Skincare spending reaches all-time high of 7%, up from 6% in Spring 2017
- Fragrance spending remains 3% of teenage female wallet share
### What is your favorite social platform?

<table>
<thead>
<tr>
<th>Platform</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
<th>Spring 2017</th>
<th>Fall 2017</th>
<th>Spring 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapchat</td>
<td>24%</td>
<td>35%</td>
<td>39%</td>
<td>47%</td>
<td>45%</td>
</tr>
<tr>
<td>Instagram</td>
<td>23%</td>
<td>24%</td>
<td>23%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Twitter</td>
<td>16%</td>
<td>13%</td>
<td>11%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Facebook</td>
<td>15%</td>
<td>13%</td>
<td>11%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Pinterest</td>
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<td>1%</td>
<td>1%</td>
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</tr>
<tr>
<td>Google+</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Piper Jaffray & Co.
Facebook to Acquire Instagram

MENLO PARK, CALIF.—April 9, 2012—Facebook announced today that it has reached an agreement to acquire Instagram, a fun, popular photo-sharing app for mobile devices.

The total consideration for San Francisco-based Instagram is approximately $1 billion in a combination of cash and shares of Facebook. The transaction, which is subject to customary closing conditions, is expected to close later this quarter.
Apple to Acquire Beats Music & Beats Electronics

CUPERTINO, California—May 28, 2014—Apple® today announced it has agreed to acquire the critically acclaimed subscription streaming music service Beats Music, and Beats Electronics, which makes the popular Beats headphones, speakers and audio software.

Apple is acquiring the two companies for a total of $3 billion, consisting of a purchase price of approximately $2.6 billion and approximately $400 million that will vest over time.

“Music is such an important part of all of our lives and holds a special place within our hearts at Apple,” said Tim Cook, Apple’s CEO.
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Overweight (OW): Anticipated to outperform relative to the median of the group of stocks covered by the analyst.
Neutral (N): Anticipated to perform in line relative to the median of the group of stocks covered by the analyst.
Underweight (UW): Anticipated to underperform relative to the median of the group of stocks covered by the analyst.
Important Research Disclosures

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